



# City of Boston

## Public Works Department & Transportation Department

Thursday, April 5th, 2012

Boston City Hall, Room 801

Mayor Thomas M. Menino, City of Boston

## 2012 Utility Construction Kickoff Meeting

Joanne Massaro, Commissioner of Public Works

Thomas Tinlin, Commissioner of Transportation

Kristen McCosh, Commissioner for the Office of Persons with Disabilities

David Mallen, Chief Highway Engineer BPWD

Para Jayasinghe, City Engineer BPWD

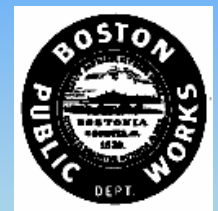
Jay Walsh, Director of Neighborhood Services

Justin Holmes, Director of Constituent Engagement

Michael Somers, Senior Civil Engineer BPWD

Ed Hesford, Supervising Traffic Engineer BTM

Mark Cardarelli, Supervisor of Utility Coordination & Compliance BPWD



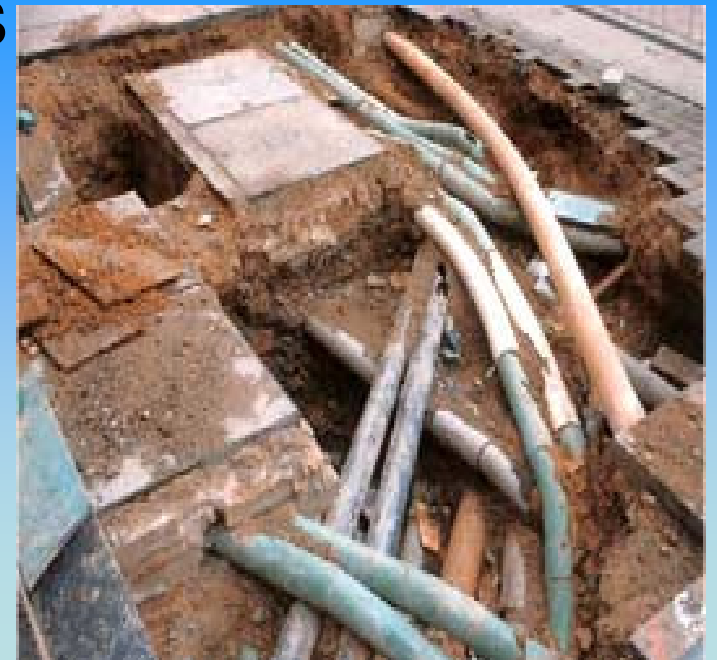
**CIU construction inspection unit**

# Welcome Boston Utilities & Contractors



- Dependable utility service is crucial to the quality of life and the growth of the Boston Economy.
- Repairs & upgrades are a fact of life.
- Roadway layout & Subsurface conditions complicate work.

**Utility Construction  
is a Demanding &  
Difficult Job!**



# Why We Have This Meeting

- The City acknowledges the busy schedules associated with construction.
- Your work impacts both the residents of Boston and the City's infrastructure.
- You chose this profession.
- With this profession comes responsibilities and expectations.
- There is a need to meet before the start of every construction season. Reinforcement is a “Good Thing”.
- **Attending this meeting ensures that you will fully understand the City's Rules and Specifications, as well as the expectations the City has for everyone during construction.**
- After leaving today's meeting it is **unacceptable** to later state that you did not understand or “**were not aware**” of the City's Rules and Specifications.

# New For 2012

- Hansen Software Program
  - Pay-As-You-Go
- Neighborhood repair permits for Sidewalks and Cast Iron Replacement/Repair
  - Sidewalk Repair Reminder
  - Casting location reviews
- Waste Reduction – Coordinating with Waste Pickup
- Street Lighting
- Utility Repair Tags for 2012
- Sign-off on all excavation work after 90 days
- Updating the *Rules and Specifications for Excavation Activity within the City of Boston* – Expected to be completed by Summer 2012



# Hansen Software

- Beginning in April, all Permittees will be required to pay a deposit fee before a permit can be issued.
- Payment accommodations will be coordinated through the Treasury Department and Public Works Permit Branch.
- Major utility companies will have the option of setting up an escrow account.
- Emergency Permits will go online beginning in June.
- Ultimate goal will be for all excavation permit applications to be started online by the Permittee.
  - Applications will still require BTB review in City Hall

# Neighborhood Permitting

- The BTD and the PWD will issue major utility companies selected neighborhood-wide permits for the permanent restoration of sidewalks, as well as for the replacement and resetting of cast iron infrastructure.
- The time and day restrictions of the permit are to be determined by BTD.
  - All BTD restrictions must be followed; e.g.
    - Major Arterials, 9:30 start
    - Proper police detail
    - TMP signs must be posted 48 hours in advance of work
    - Proper Site delineation
- Permittee must email designated BTD and PWD personnel the locations to be worked on 48 hours in advance.

11-6.20

## **Responsibility for Condition and Maintenance of Pavement**

Any person, corporation, trust, partnership, governmental body, board, commission, authority, agency, or body politic and corporate who occupies the public or private ways of the City of Boston with proper permit from the Public Works Department or otherwise, as a condition of such occupation, **shall be responsible and liable for the maintenance and restoration of all pavement within thirty (30'') inches of any and all of the appurtenant structures where they intersect the surface of the public way, roadway or sidewalk, and shall maintain said areas and repair any defect in its entirety which lies wholly or in part in the said area.**

Defects shall include, but not be limited to: pot holes, chuckholes, frost heaves, cracking, spalling, settling, delaminating or patch repair. Repairs and restorations made by the above-mentioned parties shall be made in accordance with the specifications of, and under permit from the Boston Public Works Department, and at no cost to the City. (Ord. 1983 c. 2)

# Cast Iron Infrastructure

- Each entity who owns cast iron infrastructure (manholes, hand holes, gate or valve boxes, etc.) must actively survey their structures on a regular basis.
- The survey will ensure that all damaged or sunken structures are repaired to meet the City's specifications before they become public safety concerns.
- The City will continue submitting identified failed structures to your company for repair.
  - Upon receiving a notification for a damaged or sunken casting, your company will have 30 days to repair the issue.
  - On all damaged or sunken castings where the City has listed a public safety concern, that company must make the location safe within 24 hours (cold patch if required) and schedule for immediate repair or replacement.

# Waste Reduction Department

- As a reminder to all entities working in the public right-of-way, it is your responsibility to be aware of scheduled trash and recycling pickup days for the street you are working on.
  - Your crews must provide access for trash and recycling pickup
  - If your work prevents pickup, your crews must bring the trash and recycling to the nearest accessible curb for pickup
- Pickup schedules can be found on the City's web page.
- Preventing access to trash and recycling pickup is a health and safety concern.

<http://www.cityofboston.gov/myneighborhood/>

# Street Lighting

- Any Contractor who accidentally damages a conduit must immediately contact the Street Lighting Section at 617-635-7501.
  - An Inspector will be sent to the site to identify the line that was damaged.
  - Minor damage shall be repaired by the lighting section.
  - Major damage shall be repaired by the Contractor and inspected by the Street Lighting Section prior to backfilling at no cost to the City of Boston.



- Any damage that is discovered by the street lighting section after the Contractor has left the location shall be the responsibility of that Contractor for repair.
  - The Street Lighting Section shall bill the appropriate Contractor for all work necessary for the repair and/or replacement of conduit and cables.
- It is to the Contractors benefit to notify the Street Lighting Section of any damage.
  - Damage to conduits and cables could potentially cause stray voltage which could harm the General Public.
- We will thoroughly investigate any incident; and if a Contractor is responsible for the stray voltage, they will be held liable for any and all damage (property as well as personal) sustained by creating this situation.

# Utility Repair Tags

**Remember to order your 2012 tags!**

- **Retrofit tags are to be used when Utility Repair Tags were not originally placed in the patch as required.**
  - **A special drill bit and epoxy are used to countersink retrofit tags properly into the asphalt patch.**
- **Absolutely all Permittees working in the City of Boston are required to install Utility Repair Tags on all temporary and permanent asphalt patches performed in the City of Boston.**
- **Utility Repair Tags have been a huge success with almost 100% compliance. Keep up the good work!**

# 90 Day Re-Inspection Sign-off

- 90 days after your company has completed the temporary excavation repair, a City representative will meet with your designated representative in the field and measure the actual cut sizes of your repair(s).
- Both representatives will officially sign off on the measurements taken.
- Both the City and the Permittee will keep a copy of the sign-off sheet.
- At this time, if the patch or trench needs attention, the Permittee will be required to make the necessary repairs.
- The measurements in the field will be compared with the measurements on the permit and billed or rebated accordingly.

# A Steep Decline in Performance

Last year we spoke to you about the steady decline in compliance and your need for improvement.

Instead of improving after last years Kickoff meeting, the Non Compliance ratings have dramatically worsened.

Commissioner Massaro's expectations were that the ratings would improve.

The PWD acknowledges that it holds its Permittees to a high standard, but they are standards you have already met for four years in a row.

What we asked for is not unattainable.

The City will not stand for a continued disregard for the PWD's rules, which are in place to protect both you and the public.

# Unacceptable Final Repair Stats

321 recorded in 2009

**809** recorded in 2010

**1569** recorded in 2011

- Over the past three years the number of unacceptable roadway and sidewalk excavation work has risen 500%.
- Final repairs are considered unacceptable when:
  - The loop detectors or pavement markings are not replaced as required
  - The excavation patch is not to grade with the roadway/sidewalk; is not cut squared; or improper material was used
  - Sidewalk locations were not repaired within 60 days as required

Permit excavations in 2009 that failed within 90 days:	<b>61</b>	(2.52%)
Permit excavations in 2010 that failed within 90 days:	<b>106</b>	(4.29%)
Permit excavations in 2011 that failed within 90 days:	<b>237</b>	(9.01%)

Permit excavations in 2009 that failed within 91 to 365 days:	<b>125</b>	(7.31%)
Permit excavations in 2010 that failed within 91 to 365 days:	<b>187</b>	(4.26%)
Permit excavations in 2011 that failed within 91 to 365 days:	<b>Incomplete Data</b>	

# Improvement in Compaction But.. Decline in paving procedures

	Not Smooth & Level	Sunk 2" or Greater	Not Cut Squared
2009	246	90	30
2010	342	63	88
2011	292	43	164



# Steps taken to improve your rating

- The City will be strictly employing the following procedures
  1. PWD will enforce a **0 tolerance** on all violations.
  2. Work zones will be shut down and a meeting scheduled in City Hall to discuss, **no matter what the violation.**
  3. Unacceptable patch/trench repairs; pavement markings or loop detectors, etc. not restored within 7-14 days; or sidewalks not permanently repaired within 60 days **will result in a suspension of new permits.**
  4. Multiple violations, or the poor Non Compliance rating of a contractor may result in the **suspension of their ability to work** in the City for a to be determined time period.
  5. A single egregious violation, or hostile behavior by a contractor may result in the **suspension of their ability to work** in the City for a to be determined time period.





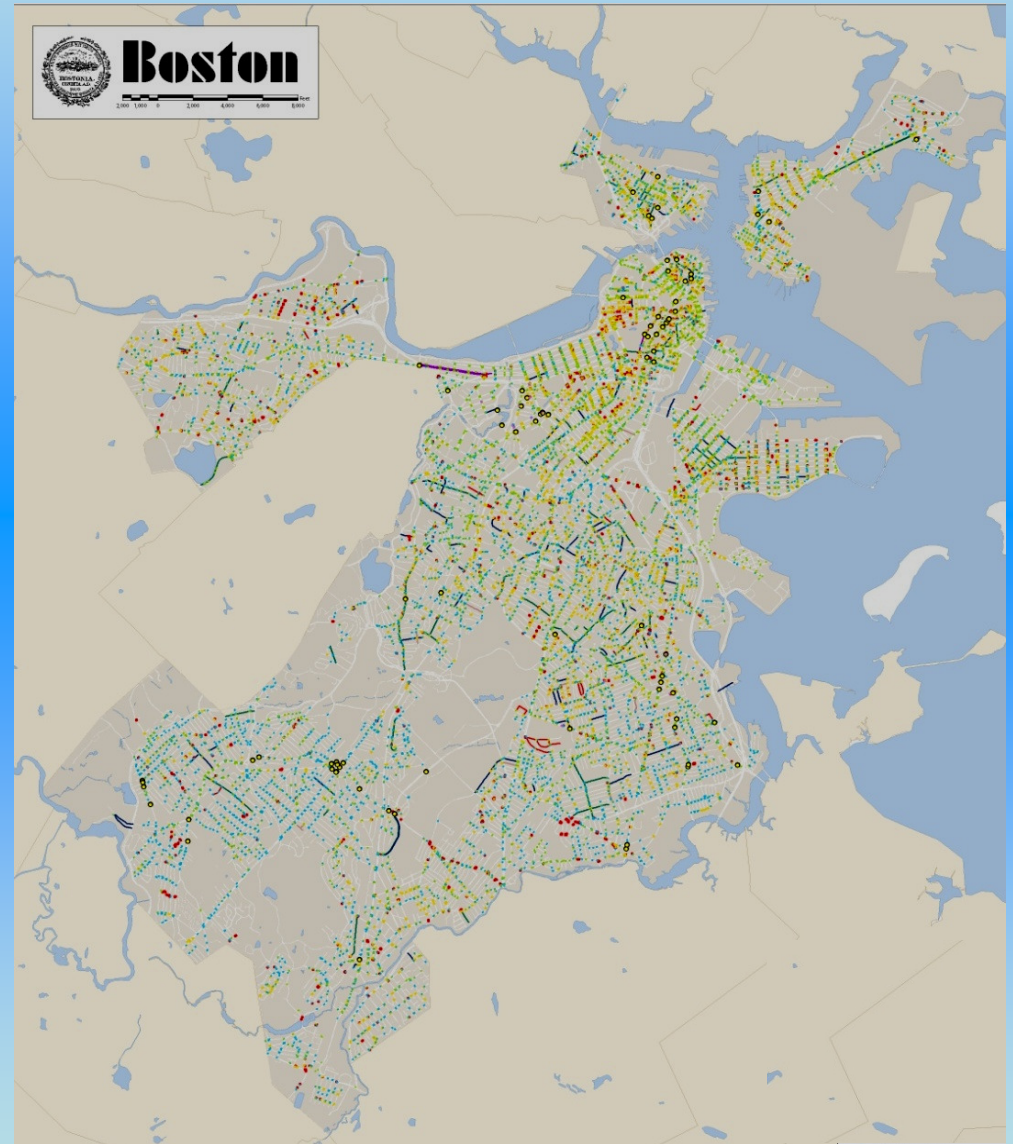
# Boston Utility Worksites

During the 2011 Construction Season there were an average of **120** active worksites and over **246** plates daily.

- Excavating
- Sidewalks
- Pipe/Conduit Installation
- Backfilling
- Plating
- Paving

Between 2009 and 2011, approximately **7280** excavation permits were issued annually.

- (Permit activation average not including extensions)



# Reasons for Street Opening Cuts

1. Age of Utility Infrastructure
2. Geography
3. Changing Population (New Services and Upgrades)
4. Technological Advancement

# What Does it all Mean?

- These four independent factors lead to constant and continuous street excavation work throughout the City of Boston.
  - **The bottom line is that the City of Boston is one of the busiest cities in the United States when it comes to utility service and repair work.**

# Coordination is a Must!!

- The constant construction can be extremely frustrating to City officials who are responsible for planning, resurfacing, and reconstruction projects in the City.
  - The ability to maintain capital street improvement programs is severely compromised by the frequency of utility construction.
  - The City's pavement structure is weakened with every utility excavation.

Since 2007 there have been over **38,000** excavation permits activated.



# City of Boston and Utility Capital Improvement

- City: Capital Programs
- Utility Companies: Upgrades and Service
- Private Contractors: Residential/Business
  - Utility and Contractor work occurs all throughout Boston.
  - The City wants to pave the streets that are in need of repair.
  - PWD needs to be sure that the streets paved aren't cut into for at least 5 years.

# Coordination: Continued

- **One of Mayor Menino's goals is to eliminate utility cuts into Guaranteed Streets altogether.**
- When a recently paved street becomes littered with utility cuts, it gives the appearance of apathy to the general public regarding coordination. This is obviously unacceptable to the Public Works Department.
- **Digging into new streets will not be tolerated!!!**

# Guaranteed Street Cut Procedures

- All openings must be saw cut prior to asphalt placement.
- Mandatory CIU inspection for all backfill and paving operations.
- Mechanical roller must be used on **ALL** phases of patch/trench paving.
  - If a mechanical roller is unable to fit within the patching area during the **BINDER** course a plate compactor will be allowed. Top course MANDATORY mechanically rolled.
- “Average” or even “Good” patches will **NOT** be acceptable!
- All final patches must be “**Excellent**”!

# Truly Cleared?

- The goal of the Public Works Department is to improve coordination to the point where each newly paved streets lives to the full extent of its intended lifespan without becoming plagued by utility construction cuts which jeopardize the infrastructure of the City roadways.
  - Resurfaced streets should remain undisturbed for at least 5 years
  - Reconstructed streets should remain undisturbed for at least 10 years
- City recommends identification of trouble mains/conduits for full replacement before any City resurfacing project takes place.

# COBUCS: Uses

- All entities seeking excavation permits must enter all of their proposed work into COBUCS
  - It is the City's expectation that all utilities, at a minimum, enter their two-year capital plans for work.
    - COBUCS checks all entered work against Guaranteed Street List to determine if the entered data lies on, or intersects, a Guaranteed Street.
    - COBUCS checks all entered work against all City programs in order to determine if the entered data lies on, or intersects, a street proposed for a City of Boston resurfacing or reconstruction program.

**COBUCS Address:** [ <http://140.241.251.251:81/cobucs/login.html> ]

# Navigation of COBUCS

## Utility Companies / City Agencies

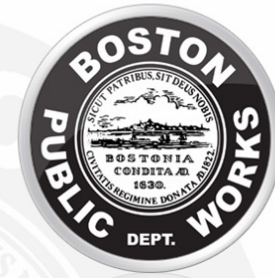


City Of Boston Utility Coordination Software

**COBUCS**



## Private Contractors / Developers



City Of Boston Utility Coordination Software

**COBUCS**





# Using COBUCS / Capital Plans

Absolutely NO PERMITS shall be issued by the Boston Public Works Permit Branch until that Permittee's proposed work has been entered into the COBUCS program.

The proposed **start date** (also called the "Reserve Date") must always be on the day you become **aware of the project!**

The PWD recommends that you extend your proposed **completion date** to the end of the Construction Season, regardless of your actual planned completion date.

This allows the City to coordinate with you more efficiently.

# Mapping Utility Construction

Your company will be required to provide a street address where your work is taking place in the appropriate entry field in the COBUCS program.

1.If your work is taking place at a single location, you must enter the house number (e.g. 42) closest to your work site. Only a number should be entered into the address field.

2.If your work consists of multiple cuts, or is a long patch or trench, you must enter the starting house number and the ending house number separated by a dash (e.g. 20-42). No spaces should be entered between your numbers and the dash mark, or else the entry will cause an error during the mapping process.

# Mapping Utility Construction Continued

3. If your work is taking place on a public alley, or some other location where there are no street addresses, enter either the number 1 if the work is near the beginning of the roadway, or the number 9999 if the work is toward the end of the alley.
4. **No additional letters or symbols (#, @, etc) should ever be entered into the “Address” field when submitting COBUCS entries for clearance.**

**Fill in the information below:**

Length of Repair:

1234

Location/Address:

1-999

Estimated Start Date:

Estimated End Date:

Repair Type:

Select a repair type...

Internal Reference:

Internal Reference #



Save Info

**Fill in the information below:**

Length of Repair:

1234

Location/Address:

123

Estimated Start Date:

Estimated End Date:

Repair Type:

Select a repair type...

Internal Reference:

Internal Reference #



Save Info

**Fill in the information below:**

Length of Repair:

1234

Location/Address:

123 Tremont St

Estimated Start Date:

Estimated End Date:

Repair Type:

Select a repair type...

Internal Reference:

Internal Reference #



Save Info

**Fill in the information below:**

Length of Repair:

1234

Location/Address:

Three

Estimated Start Date:

Estimated End Date:

Repair Type:

Select a repair type...

Internal Reference:

Internal Reference #



Save Info

+ Add Segment - Delete Segment | Progress: ▼ PWD □ Completed: □ Ref: □ Submit

	Street	From	To	Hi	Type	Begin	End	Progress
+	MAYFIELD ST	DORCHESTER	KERSFIELD ST	END	Asphalt Resurfacing	01/20/2011	12/31/2012	Proposed [4]
+	ST STEPHEN ST	MASSACHUSETTS	EARE PL	END	Asphalt Resurfacing	01/20/2011	12/31/2012	Proposed [3]
+	GREENWICH PK	COLUMBUS AV	AREMONT ST	END	Asphalt Resurfacing	01/20/2011	12/31/2012	Proposed [3]
+	APPLETON ST	TREMONT ST	ARENDON ST	70	Asphalt Resurfacing	01/20/2011	12/31/2012	Proposed [3]
+	EAST FIFTH ST	N ST	T	826	Asphalt Resurfacing	01/20/2011	12/31/2012	Proposed [8]
+	COMMERCIAL ST BP N	CHARTER ST	CAUSEWAY ST EB	END	Asphalt Resurfacing	01/20/2011	12/31/2012	Cleared

The PWD has been developing new features on its web page at [www.cityofboston.gov/publicworks/](http://www.cityofboston.gov/publicworks/)

The Mayor has specifically requested that the PWD begin mapping all active construction projects occurring throughout the City. To accomplish this we have linked the COBUCS data with the City's own mapping program.

**All entities are required to update the status of their programs (In Progress, Completed, etc) on a daily basis!**

# COBUCS Conflicts

- On Guaranteed Street Conflicts your company must submit a letter (on company letterhead) to PWD Permit Supervisor, **Anne McNeil** explaining the need to excavate the Guaranteed roadway, and agree to pay for the associated cost of restoring the roadway to it's Guaranteed state.
  - Anne McNeil: [Anne.McNeil@cityofboston.gov](mailto:Anne.McNeil@cityofboston.gov)
- On Proposed Resurfacing/Reconstruction Street Conflicts, your company must immediately contact and coordinate with Mark Cardarelli by emailing him at [mark.cardarelli@cityofboston.gov](mailto:mark.cardarelli@cityofboston.gov) or calling him at 617-635-4951.



# COBUCS Reports

- COBUCS offers three reports to be reviewed to better aid your company.
  - The Guaranteed Street List
  - City of Boston's Capital Plans
  - Your Company's Capital Plans
    - To view a report, select the Reports icon on the COBUCS starting menu

# Clearance Sign-Off

- All streets that will be resurfaced or reconstructed in 2012 will have been officially cleared and signed off on by the 26 major utility companies and City agencies.
- Every private contractor outside of the major 26 who performs roadway excavation work in the City of Boston has had access to all proposed streets, and the opportunity to contact the City for possible deferment.

# The Bottom Line...

- The City's expectations are that all streets to be resurfaced or reconstructed in 2012 are free of any future utility planned or repair work for a minimum of 5 years.
- Your company was given every opportunity to defer City program streets throughout the clearance process.
- The cost of digging into a new street will be severe. It will range from, at a minimum, a curb to curb overlay fee, to the possibility of denial of a work permit for that street.

# Utility Construction



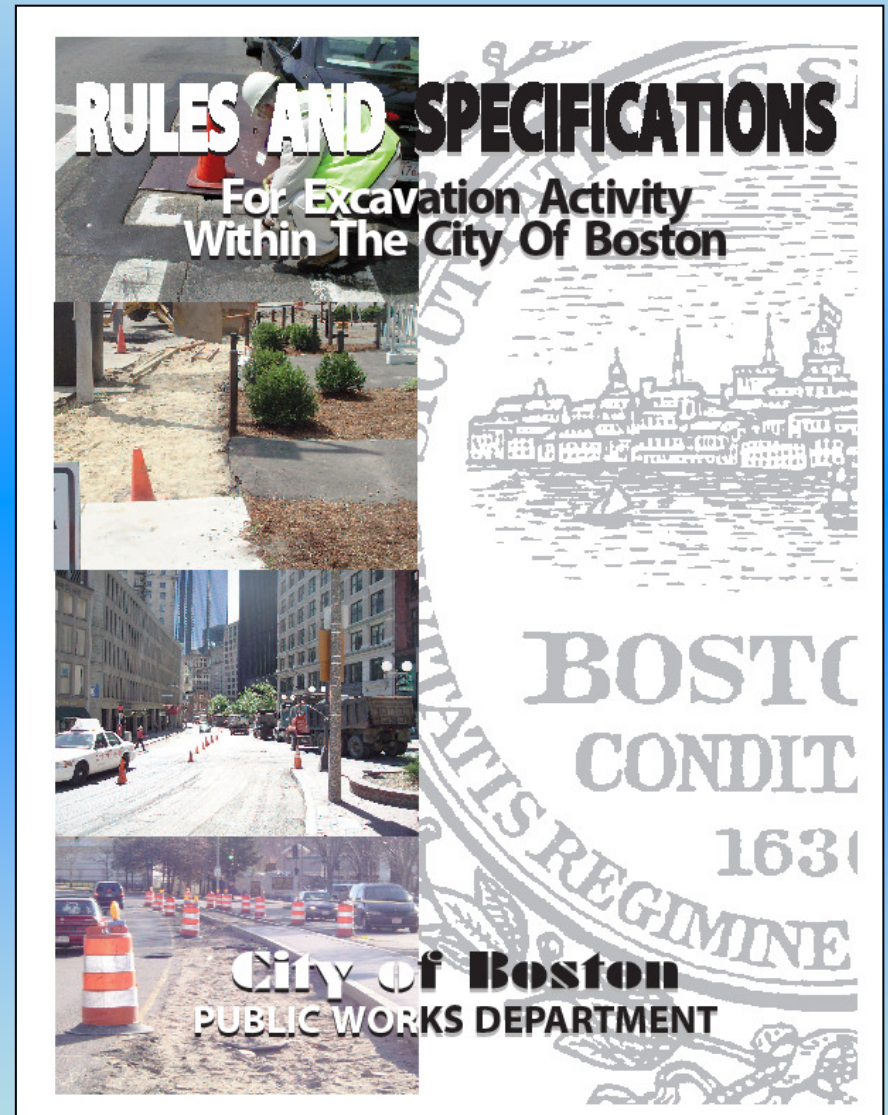
# Inventory

- Before the start of the Construction season you must check all your equipment to be sure they are in working order. None of us want to have your work stopped suddenly due to equipment breakdown.
- Signage
  - All Permittees must have ALL appropriate signage for utility construction work. Lack of proper signage will result in immediate shutdown.
  - All signage must have lettering that is clearly visible. Damaged signs should be replaced. At no time should a sign be illegible to the public.
- Delineation of work site
  - Cones, tape, barrels, interlocking barricades, etc.



# City Rules & Specifications

- Available online at [www.CityofBoston.gov/PublicWorks](http://www.CityofBoston.gov/PublicWorks)
- Created with input from utilities & various agencies
- In the process of being updated.
- Newest version will be completed by the end of spring.
- Edits and changes include Utility Repair Tags, Hanson, patch and sidewalk repair, edge stone, casting responsibility, etc.



# PWD's Responsibility

During Utility Construction, the PWD strives to do three things:

- 1- Ensure the safety of the public during construction
- 2- Minimize the inconvenience to the public
- 3- Protect and preserve the City's Infrastructure



# Permittee's Responsibility

**The Safety and Quality of Boston's right-of-ways cannot be sacrificed!**

Follow BTB approved Traffic Management Plans & work hours.

Adhere to Public Works Rules & Specifications at all points during construction.

# Committed to Superior Construction

## **CIU construction inspection unit**

A specialized unit created by Mayor Menino in 2003 to increase oversight personnel to combat poor workmanship.

### **Mayor Menino Demands Perfection!**

#### BWSC CSO initiative

- Electrical infrastructure upgrade
- Telecommunication
- Growth in Boston real estate markets
- Angle of Influence work
- **OLD INFRASTRUCTURE**
- CIU Assists regular BPWD workforce
- Marked improvement since creation in Fall 2003

**Changing expectation of construction in Boston**

 *Education & Inspection*

 *Documentation*

 *Evaluation*

 *Enforcement*

# Standardized Inspection

- Standardized 15 item report
- Items based on City Rules & Specifications
- “Snapshot” of your job
- Database stores & evaluates all inspection data

[illegible]


# Boston's Street Opening Management System


## Build an Inspection Database to Store and Evaluate Inspection Data

- ✓ Tracking Permittee & Violations
- ✓ Develop Report Card for Contractors
- ✓ Report Card Helps Educate and Enforce Rule & Specs
- ✓ Benefiting Utilities

## Ensure a “Top-Down” Support Structure

- ✓ Starts with Mayor Menino and Commissioner Massaro of the Public Works Department
- ✓ City Annual Report

<div>  <b>construction inspection unit</b> </div>						
Noncompliance Rating Summary						
KeySpan						
7/1/2008 to 7/31/2008						
Inspection Item	# OF INSPECTIONS	# OF VIOLATIONS	Period Company RATING	Period City Wide RATING	Year-To-Date Company RATING	Year-To-Date City Wide RATING
1. Create Permit Repeat? Is permit correct? Call-in logged? Paper signed?	489	9	1.84%	1.34%	0.79%	0.64%
2. Ability to Permit Restrictions? Two-way traffic? Police/Driver? Work hours? Restrictions?	482	3	0.62%	0.55%	0.18%	0.30%
3. Safe work Zone? Grouped? Guarded? Worked? Etc correct, barriers, signs etc.	476	0	0.00%	0.00%	0.04%	0.16%
4. Suitable Re-used Gravel Material? When the material is not proper to use?	0	0	NO INSP	0.00%	0.00%	0.00%
5. Suitable New Gravel Material? Tested material? Condition test on site?	142	0	0.00%	0.00%	0.00%	0.07%
6. Compacted to 8" Maximum Lifts? And 1.5 in. 90% density, type of equipment used, and water.	150	0	0.00%	0.29%	0.00%	0.07%
7. Contained Debris/Fill/CDD? Proper Use of CDD?	0	0	NO INSP	0.00%		0.00%
8. Opening Sealed? Seal Patch Required to be sealed? Seal Patched? Seal Patched?	609	4	0.66%	1.11%	1.35%	1.19%
9. Edges Straight and Vertical? Cut Square? Use Face Coat? CDD? AT 1903 CP, 1903	187	0	0.00%	0.29%	0.00%	0.09%
10. Two 1-1/2" Lifts of Hot Mix Asphalt? If take thickness, parallel to road surface, 10.155 10.155	77	0	0.00%	0.00%	0.00%	0.00%
11. Roadway Satisfactorily Complete? Ongoing, Accidents, Not Accidents, Is it smooth or bumpy?	194	10	5.15%	5.68%	1.74%	1.88%
12. Two Strike work Complete?	0	0	0.00%	0.00%	0.00%	0.33%
	0	0	0.00%	3.45%	0.00%	1.16%
	0	0	NO INSP		0.00%	0.00%
	1					
	26					
Rating =	0.92%	0.93%	0.56%	0.60%		
<div> <b>Rating Scale %</b>            GOOD = 0.67            FAIR = 1.35            IMPROVEMENT = 2.00            0 = POOR         </div>						



**CITY OF BOSTON**

**PUBLIC WORKS DEPARTMENT**

**CIU construction inspection unit**

**QUICK LINKS**

- search permit by number
- search permit by street
- search inspection reports
- year-to-date violation ratios
- update permit library  
(use after upload from peopleSoft)

**DATA ENTRY**

- log inspector's report
- log contractor/utility call-in

**PRODUCE FIELD REPORTS**

- daily inspector schedule
- 90 day patch/trench inspection
- permits not inspected or not finalized

**CONSTRUCTION INSPECTION UNIT**

- monthly inspector statistics
- daily attendance and activities
- inspection statistics

**STREET OPENING STATISTICS**

- monthly violation ratios
- shutdown ratios
- 90 day inspection statistics
- 90 day inspection complete report
- utility/contractor performance report

**BAD PATCH/TRENCH SYSTEM**

- access bad patch/trench system

# “It’s Construction”...?

The City acknowledges that construction is difficult and complicated.

Construction is a chain-of-command.  
Breakdowns in communication can happen.

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However, the CIU will not accept blatant disregard, cutting corners, indifference, or apathy as an excuse for not following the Rules and Specification and state: “It’s Construction”.

# Item 1 – Permitting & Job Start

- Current Permit on jobsite at all times (planned work)
- Jackie's Law Permit on Job Site at all times.
- Call placed to City Hall at least 24hrs prior to:  
(emergencies within 1 hour)
  - Start
  - Backfill
  - Pave
  - Completion
  - **Sidewalk Permanent Repair**
- Signage
  - ID signs
  - Job site must be identifiable

CITY of BOSTON - PUBLIC WORKS DEPT.  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTORS REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complete, RTA, RMC, etc.  
☐ Inspection Items not performed Size of Cut on Permit \_\_\_\_\_

Roadway or Sidewalk?  
Patch / Trench or Patch / Trench Depth?

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_

1. Current Permit Present? ☐ YES ☐ NO  
2. Abiding to Permit Restrictions? ☐ YES ☐ NO  
3. Safe Work Zone? ☐ YES ☐ NO  
4. Suitable Paved Gravel Material? ☐ YES ☐ NO  
5. Suitable New Gravel Material? ☐ YES ☐ NO  
6. Compacted in 8" Maximum Lifts? ☐ YES ☐ NO  
7. Controlled Density Fill (CDF)? ☐ YES ☐ NO  
8. Opening Secured? ☐ YES ☐ NO

Notes: \_\_\_\_\_  
Violation: \_\_\_\_\_  
SHUTDOWN ☐

Photo? YES NO

800-592-2000  
www.nstaronline.com




# Emergency Permits

- Purchased in blocks from PWD permit office
- To be used in Emergency situations only
- Emergency situations must be called in within 1 hour of commencement of work.
- Must apply for PWD permit after 24hrs of work
- Delaying of PWD permit request unacceptable
- Delay of job requires reason in writing
- **Use of an Emergency permit for non-emergency work will result in an automatic shutdown of all new permit requests.**



# Item 2 – BTD Requirements

- BTD Approval Form must be on job site at all time.
- BTD approved traffic management plan on jobsite at all times (MUTCD signs)
- Traffic flow
- Police Detail
- Work Hours
- Stockpiling only where approved

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, RTA, RMHC, etc.  
☐ Inspection items not performed Size of Cut on Permit? \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Pavch / Trench or Pavch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

	Notes	Violation
1. Current Permit Expires?	n/a YES NO	<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a YES NO	<input type="checkbox"/>
3. Safe Work Zone?	n/a YES NO	<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a YES NO	<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a YES NO	<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a YES NO	<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a YES NO	<input type="checkbox"/>
8. Opening Secured?	n/a YES NO	<input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt?	n/a YES NO	<input type="checkbox"/>
10. Final Paving Requirements	n/a YES NO	<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a YES NO	<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a YES NO	<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a YES NO	<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a YES NO	<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a YES NO	<input type="checkbox"/>
Public Safety Issue?	YES NO	<input type="checkbox"/>
Violation Delivered?	YES NO	<input type="checkbox"/>
Utility Rep. Connected?	YES NO	<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM



# Major Project Notification Procedures

- Utility major projects take months, or even years, to plan. For that reason it should not be a burden for any utility company to provide adequate advanced notice to the surrounding affected residents and businesses regarding these projects.
- All Permittees are required to contact the Office of Neighborhood Services (ONS) **30** days in advance of major work.
  - ONS will determine whether or not a Community meeting will be necessary before the project is approved.
- All Permittees must contact the BTB a minimum of **30** days in advance of major work (as determined by BTB).
  - Permittees must have their Traffic Management Plan in place for review and approval before obtaining permission to work by the PWD.

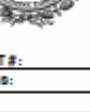


- All Permittees will send letters to all residents two weeks in advance of the start of work.
  - Letters must explain the reason for the work, the estimated start & complete date, name of the contractor, and 24 hour contact information including the name of Permittee Supervisor, etc.
- As per BTD requirements, all Permittees must post and leaflet the affected streets a minimum of 48 hours before the start of any construction.
- All utility companies and private contractors must take into consideration the impact the construction has on the residents of the affected street, and try to the best of their ability to coordinate & cooperate with the neighborhood.

## Item 3 – Condition of Work Zone

- OSHA / ADA / AAB / Dig Safe requirements maintained at all times.
- Jackie's Law applicable on unattended trench excavations.
- Safe & Guarded Work Zone
- Cones, signs, plastic drums etc..
- Continuous Barricades (where required)
- Shoring (where required)

**Be sure to keep a safe, clean & well defined jobsite!**



**CITY OF BOSTON - PUBLIC WORKS DEPT.**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTORS REPORT**

☐ Normal CIRU Inspection      ☐ Other Inspection \_\_\_\_\_

☐ Inspection Items not performed

Please specify completed, RTD, NMC, etc.  
 Size of Cut on Permit: \_\_\_\_\_

---

**PERMIT #:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Street:** \_\_\_\_\_

**Neighborhood:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Permittee:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_

**Foreman:** \_\_\_\_\_

**Time From:** \_\_\_\_\_ From Time Included

**Weather/Temp:** \_\_\_\_\_


**Roadway or Sidewalk?**

**Paich / Trench or Paich / Trench** \_\_\_\_\_

**Depth?** \_\_\_\_\_

---

Notes	Violation
1. Current Permit Present? <small>(Is permit current? Call to log it?)</small>	YES NO <input type="checkbox"/>
2. Abiding to Permit Restrictions? <small>(Turning traffic? Police On Call? No work hours? Roadway? Property adjacent?)</small>	YES NO <input type="checkbox"/>
3. Safe Work Zone?	YES NO <input type="checkbox"/>
4. Suitable Reused Gravel Material?	YES NO <input type="checkbox"/>
5. Suitable New Gravel Material?	YES NO <input type="checkbox"/>
6. Compacted in 8" Maximum Lifts? <small>(2 lifts for 16" thickness, 3 lifts if required, max 8" if present)</small>	YES NO <input type="checkbox"/>
7. Controlled Density Fill (CDF)? <small>(Authorized by RW-21 Material specs specifications?)</small>	YES NO <input type="checkbox"/>
8. Opening Secured? <small>(Net? Plastic? Tarps or 4' x 8' or 4' x 10' Cold patch (NMC), No gravel)</small>	YES NO <input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>(2" total thickness, parallel to road surface, 100% INTERLOCK)</small>	YES NO <input type="checkbox"/>
10. Final Paving Requirements <small>(Call Number 4-A-10-0 Surface Placed? Tar Coat Applied)</small>	YES NO <input type="checkbox"/>
11. Roadway Satisfactorily Complete? <small>(Drilling, Aseptic, Smooth and level? Or Unacceptable)</small>	YES NO <input type="checkbox"/>
12. Temp Sidewalk Acceptable?	YES NO <input type="checkbox"/>



**ES NO SHUTDOWN** ☐

Date: \_\_\_\_\_



- Boston is a densely populated City requiring proper protection to all those that encounter an excavation.
- The Permittee must surround the excavation with cones, barrels, barricades etc.
- The cones and barrels must be taped or roped to protect the pedestrians, workers and vehicles passing through the work zone.
- Continuous barricades must be used where specified by the BTB
- There will be no exceptions and violations for noncompliance will be issued and the job will be shut down.



# Properly Protected Work Zone



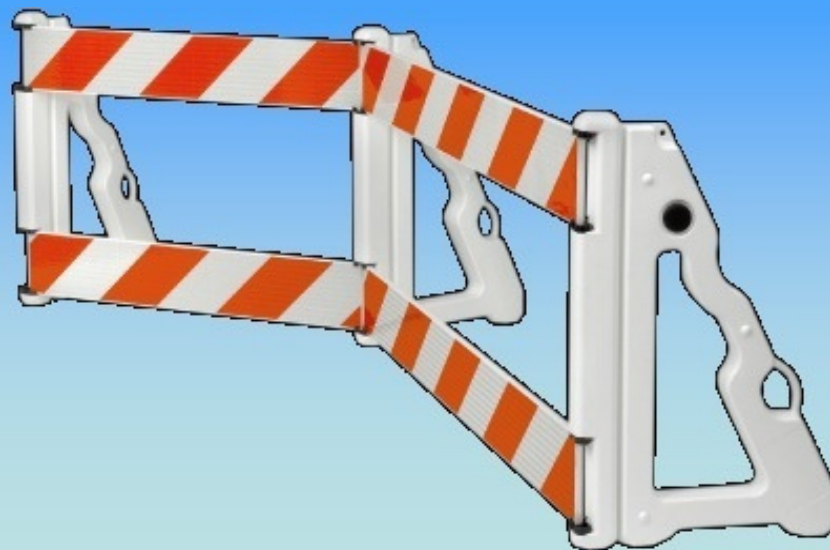


# Barricades

- Both the PWD and the BTD have determined that certain locations require more than just tape or rope between cones to secure a work site for the protection of pedestrians and workers
- The BTD & the CIU have determined that certain work zones will require the use of Barricades.
  - Barricades are for delineation of active excavation outside of pedestrian areas sites and are not compliant for pedestrian path of travel.
- These barricades must adhere to OSHA specifications.
- The PWD enlisted the assistance of certain contractors to begin testing the use of Continuous Barricades.
  - Those contractors, along with BPD Detail officers, agreed that the barricades provided superior protection of the workers, motorists, and pedestrians alike.
- **BTD will sign off on the type of barricades to be used based upon location and traffic needs.**

# Temp Pedestrian Path of Travel

- Certain BTD Traffic Management Plans may required the application of temporary pedestrian paths of travel (Jersey Barriers, etc).
- Beginning 2012, BTD may require an ADA compliant pedestrian barricades and channelizing devices for the visually impaired.



# MUTCD STATUTES

## R302.4

Pedestrian barricades and channelizing devices shall be continuous, stable, and non-flexible and shall consist of a wall, fence, or enclosures specified in section 6F-58, 6F-63, and 6F-66 of the MUTCD (incorporated by reference; see R104.2.4).

### R302.4.1

A continuous bottom edge shall be provided 150 mm (6 in) maximum above the ground or walkway surface.

### R302.4.2

Devices shall provide a continuous surface or upper rail at 0.9 m (3.0 ft) minimum above the ground or walkway surface. Support members shall not protrude into the alternate circulation path

# Item 3 – Foreman Check List

- Before excavation begins the Foreman must have performed the following:
  - Checked to be sure the current permit is valid and on site.
  - Made sure that all required signage has been placed properly (ID, sidewalk closed, utility ahead, etc.)
  - Verified that all BTD traffic regulations are being upheld, allowing traffic flow (cones, interlocking barricades, barrels, tape, etc).
  - Excavation area has been secured and cordoned off.
- Only after each of the above requirements has been established can the work take place.

# Items 4 & 5 - Backfill Material

- (MHD M1.03.1) “Process Gravel for Sub-base” Required
- Re-used and Recycled excavated material requires laboratory test results signed by a professional engineer that the backfill material conforms to MHD M1.03.1
  - The City is currently revising its position on the requirements for recycled material.
- Annual submission of current testing (sieve analysis & proctor)
- Random onsite & source verification testing
- Where a layer of concrete, cobblestone, granite pavers, or other supporting material exists, the Permittee shall replace with concrete prior to installation of temporary pavement.

**CITY OF BOSTON - PUBLIC WORKS DEPT**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTORS REPORT**

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
 (please specify compliance, RTA, RMHC, etc.)  
☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Roadway or Sidewalk? \_\_\_\_\_  
 Address: \_\_\_\_\_ Contractor: \_\_\_\_\_  
 Street: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
 Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_

	Day of the week	Month	Year	Notes	Violation
1. Current Permit Present?	na	YES	NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	na	YES	NO		<input type="checkbox"/>
3. Safe Work Zone?	na	YES	NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	na	YES	NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	na	YES	NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	na	YES	NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	na	YES	NO		<input type="checkbox"/>
8. Opening Secured?	na	YES	NO		<input type="checkbox"/>
9. Two 4-1/2" Lifts of Hot Mix Asphalt?	na	YES	NO		<input type="checkbox"/>
10. Final Paving Requirements	na	YES	NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	na	YES	NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	na	YES	NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	na	YES	NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	na	YES	NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	na	YES	NO		<input type="checkbox"/>
Public Safety Issue?	YES	NO	Photo?	YES	NO
Utility Rep. Connected?	YES	NO			SHUTDOWN <input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM





Not Acceptable!!



Acceptable.



# Item 6 – Compaction


## Critical step in street opening restoration

- Standard - 8" lifts sufficient for standard equipment (jumping-jack).
- Control-strip required for equipment capable of greater compaction depth.
- Crowded trench can prohibit standard compaction.
- Poor compaction results in unacceptable patches/trenches.
- **Any Permittee work zone found to be in egregious violation of Item 6 shall be shut down.**

# Trust will have been broken!

- **Possibility of all active work zones being shut down (Excluding Emergency work)**





**CITY OF BOSTON**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTOR REPORT**

please specify completion, RTA, BMA, etc.

Size of Cut on Permit \_\_\_\_\_

☐ Normal CUI Inspection  
☐ Inspection Items not performed

☐ Other Inspection

PERMIT #	Permittee:	Roadway or Bikeway:	Date/Time
Address:	Contractor:	North: _____ South: _____	Day: _____ Time: _____
Street:	Foreman:	Phone: _____	
Neighborhood:	Time From: _____ To: _____	Total Hours: _____	
Date: _____	Weather Temp: _____		

Day of the week, Month, & Year

Notes

Violation	Notes
1. Current Permit Photos?	YES NO
2. Awaiting permit? (See page 4)	YES NO
3. Adding in Permit Restrictions?	YES NO
4. Safety Traffic Signage and/or Roadway Project?	YES NO
5. Safe Work Zone?	YES NO
6. Existing Excavated Gravel Material?	YES NO
7. Material removed prior to work?	YES NO
8. Suitable New Gravel Material?	YES NO
9. Compacted in 18" Maximum Lifts?	YES NO
10. Final Gravel Surface 18" or less?	YES NO
11. Opening Secured?	YES NO
12. Permit Photos by 2nd or 3rd Party (BMA, RTA, etc.)?	YES NO
13. Final Gravel Surface 18" or less?	YES NO
14. Final Gravel Surface 18" or less?	YES NO
15. Final Gravel Surface 18" or less?	YES NO
16. Final Gravel Surface 18" or less?	YES NO
17. Final Gravel Surface 18" or less?	YES NO
18. Final Gravel Surface 18" or less?	YES NO
19. Final Gravel Surface 18" or less?	YES NO
20. Final Gravel Surface 18" or less?	YES NO
21. Final Gravel Surface 18" or less?	YES NO
22. Final Gravel Surface 18" or less?	YES NO
23. Final Gravel Surface 18" or less?	YES NO
24. Final Gravel Surface 18" or less?	YES NO
25. Final Gravel Surface 18" or less?	YES NO
26. Final Gravel Surface 18" or less?	YES NO
27. Final Gravel Surface 18" or less?	YES NO
28. Final Gravel Surface 18" or less?	YES NO
29. Final Gravel Surface 18" or less?	YES NO
30. Final Gravel Surface 18" or less?	YES NO
31. Final Gravel Surface 18" or less?	YES NO
32. Final Gravel Surface 18" or less?	YES NO
33. Final Gravel Surface 18" or less?	YES NO
34. Final Gravel Surface 18" or less?	YES NO
35. Final Gravel Surface 18" or less?	YES NO
36. Final Gravel Surface 18" or less?	YES NO
37. Final Gravel Surface 18" or less?	YES NO
38. Final Gravel Surface 18" or less?	YES NO
39. Final Gravel Surface 18" or less?	YES NO
40. Final Gravel Surface 18" or less?	YES NO
41. Final Gravel Surface 18" or less?	YES NO
42. Final Gravel Surface 18" or less?	YES NO
43. Final Gravel Surface 18" or less?	YES NO
44. Final Gravel Surface 18" or less?	YES NO
45. Final Gravel Surface 18" or less?	YES NO
46. Final Gravel Surface 18" or less?	YES NO
47. Final Gravel Surface 18" or less?	YES NO
48. Final Gravel Surface 18" or less?	YES NO
49. Final Gravel Surface 18" or less?	YES NO
50. Final Gravel Surface 18" or less?	YES NO
51. Final Gravel Surface 18" or less?	YES NO
52. Final Gravel Surface 18" or less?	YES NO
53. Final Gravel Surface 18" or less?	YES NO
54. Final Gravel Surface 18" or less?	YES NO
55. Final Gravel Surface 18" or less?	YES NO
56. Final Gravel Surface 18" or less?	YES NO
57. Final Gravel Surface 18" or less?	YES NO
58. Final Gravel Surface 18" or less?	YES NO
59. Final Gravel Surface 18" or less?	YES NO
60. Final Gravel Surface 18" or less?	YES NO
61. Final Gravel Surface 18" or less?	YES NO
62. Final Gravel Surface 18" or less?	YES NO
63. Final Gravel Surface 18" or less?	YES NO
64. Final Gravel Surface 18" or less?	YES NO
65. Final Gravel Surface 18" or less?	YES NO
66. Final Gravel Surface 18" or less?	YES NO
67. Final Gravel Surface 18" or less?	YES NO
68. Final Gravel Surface 18" or less?	YES NO
69. Final Gravel Surface 18" or less?	YES NO
70. Final Gravel Surface 18" or less?	YES NO
71. Final Gravel Surface 18" or less?	YES NO
72. Final Gravel Surface 18" or less?	YES NO
73. Final Gravel Surface 18" or less?	YES NO
74. Final Gravel Surface 18" or less?	YES NO
75. Final Gravel Surface 18" or less?	YES NO
76. Final Gravel Surface 18" or less?	YES NO
77. Final Gravel Surface 18" or less?	YES NO
78. Final Gravel Surface 18" or less?	YES NO
79. Final Gravel Surface 18" or less?	YES NO
80. Final Gravel Surface 18" or less?	YES NO
81. Final Gravel Surface 18" or less?	YES NO
82. Final Gravel Surface 18" or less?	YES NO
83. Final Gravel Surface 18" or less?	YES NO
84. Final Gravel Surface 18" or less?	YES NO
85. Final Gravel Surface 18" or less?	YES NO
86. Final Gravel Surface 18" or less?	YES NO
87. Final Gravel Surface 18" or less?	YES NO
88. Final Gravel Surface 18" or less?	YES NO
89. Final Gravel Surface 18" or less?	YES NO
90. Final Gravel Surface 18" or less?	YES NO
91. Final Gravel Surface 18" or less?	YES NO
92. Final Gravel Surface 18" or less?	YES NO
93. Final Gravel Surface 18" or less?	YES NO
94. Final Gravel Surface 18" or less?	YES NO
95. Final Gravel Surface 18" or less?	YES NO
96. Final Gravel Surface 18" or less?	YES NO
97. Final Gravel Surface 18" or less?	YES NO
98. Final Gravel Surface 18" or less?	YES NO
99. Final Gravel Surface 18" or less?	YES NO
100. Final Gravel Surface 18" or less?	YES NO









# Item 6 – Foreman Check List

- Before backfilling takes place the Foreman must have performed the following:
  - Is the gravel being supplied from an approved source?
    - Reject any material that is frozen, wet, or otherwise visually appearing out of specifications.
    - Even if the gravel is coming from an approved source, if a foreman has what the CIU determines to be unacceptable backfill material, the Foreman is liable.
  - On standard backfill compaction equipment (Jumping-Jacks, plate compactors, etc) the Foreman must perform no more than 8" lifts with at least 5-7 passes each lift.



It might look good at first glance...


However, it is the responsibility of the Foreman to scrutinize the gravel as it's placed to ensure that it meets spec.





# Item 7 – Controlled Density Fill

- Flow-Fill to be used only with permission from PWD
- 24" gravel buffer to be provided below pavement structure for drainage
- Min. 24 hr setup

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTORS REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, STD, RMC, etc.  
☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Pavch / Trench or Pavch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

	Notes	Violation
1. Current Permit Present?	n/a YES NO	<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a YES NO	<input type="checkbox"/>
3. Safe Work Zone?	n/a YES NO	<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a YES NO	<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a YES NO	<input type="checkbox"/>
6. Compacted to 2" Maximum Lifts?	n/a YES NO	<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a YES NO	<input type="checkbox"/>
8. Opening Secured?	n/a YES NO	<input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt?	n/a YES NO	<input type="checkbox"/>
10. Final Paving Requirements	n/a YES NO	<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a YES NO	<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a YES NO	<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a YES NO	<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a YES NO	<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a YES NO	<input type="checkbox"/>
Public Safety Issue?	YES NO	<input type="checkbox"/>
Violation Delivered?	YES NO	<input type="checkbox"/>
Utility Rep. Connected?	YES NO	<input type="checkbox"/>


Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

# Item 8 – Opening Secured

- City expects all active work sites to be backfilled and paving every day.
- Steel Plates
  - To be used when conditions dictate
  - Manpower and production reasons not valid
  - City must be made aware of plated locations
  - Permittees are responsible for daily monitoring of plated locations.
- Plate installation
  - Recessed (Leveling Course)
  - “Bermed” (24” ramp in path of travel)
  - Minimum 18” over excavation
  - Monitor sidewalks, especially in wet weather
  - Plate must have visible ID and Phone # for emergency contact on both sides.

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
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INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, STD, RMC, etc.  
☐ Inspection items not performed Size of Cut on Permit? \_\_\_\_\_

ROADWAY OR SIDEWALK?  
Pavch / Trench or Pavch / Trench Depth?

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_

	Day of the week	Month	Year	Notes	Violation
1. Current Permit Present?	n/a	YES	NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a	YES	NO		<input type="checkbox"/>
3. Safe Work Zone?	n/a	YES	NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a	YES	NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a	YES	NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a	YES	NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a	YES	NO		<input type="checkbox"/>
8. Opening Secured?	n/a	YES	NO		<input type="checkbox"/>
9. Two 4-400-Lbs-of-Hot-Mix Asphalt?	n/a	YES	NO		<input type="checkbox"/>
10. Final Paving Requirements	n/a	YES	NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a	YES	NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a	YES	NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a	YES	NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a	YES	NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a	YES	NO		<input type="checkbox"/>
Public Safety Issue?	YES	NO	Photo?	YES	NO
Utility Rep. Connected?	YES	NO			
Comments: _____					
Inspected by: _____ Signature: _____ Date: _____					

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

# Item 8 – Opening Secured Cont'd

- Any steel roadway plate(s) located within a bike lane must have a skid resistant coating applied for the safety of the riders.
- **Absolutely No openings will be left in gravel!**
- Cold Patch - Any excavation left to grade in Cold Patch asphalt must be monitored and replace within 48 hrs.
- **Pedestrian ramps must be ADA/AAB compliant at end of each day.**
- The City will not tolerate excavations that have not been secured as specified in the Rules and Specifications.
- **The City will not accept excuses, lack of effort, or a lack of professionalism when it comes to securing job sites in the City of Boston.**
- **Securing the Public's Safety comes before the convenience of doing work.**



# Not Acceptable!





# Acceptable.





# Acceptable.



NATIONAL  
617-469-2300  
GRID

12/16/2009



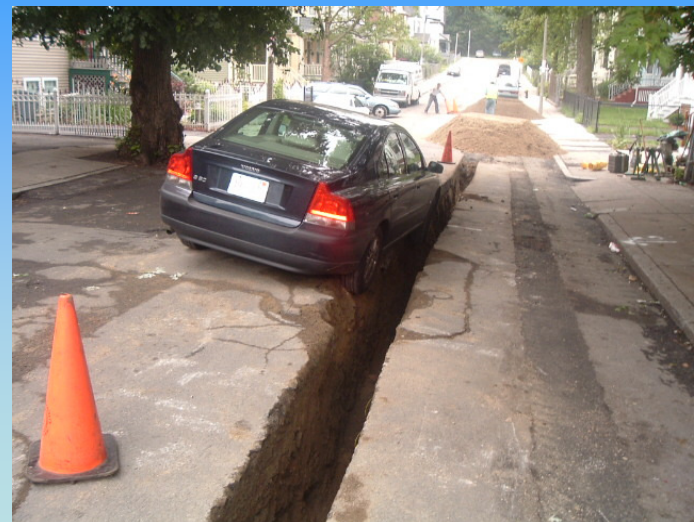
# Item 8 – Inactive locations Cont...

## Jackie's Law

### **Jackie's law**

- **Applies to unattended open trenches.**
- **Any public safety violation on unattended trenches will be sited under “Jackie’s Law” as well as BPWD Rules and Specifications.**
- **Any public safety violation on attended trenches will be a violation of OSHA as well as BPWD Rules and Specifications.**

Any site where the excavation is in excess of 3 feet below grade and the depth of which is, in general, greater than the width, but the width of the trench, as measured at the bottom, is no greater than 15 feet will be subject to “Jackie’s Law” and all regulations therein.




# Item 8 – Foreman Check List

- Before the Foreman and crew leave the job site at the end of their shift, they must have performed the following:
  - The work zone is swept and clean of debris and ADA/AAB compliant.
  - All paved areas (Cold Patch or HMA) are to grade of the existing roadway.
  - No equipment or material is stockpiled without the express permission from the BTB.
  - The sidewalls of the excavation has been inspected for stability and shored where needed before plating.
  - All plates must have the ID name and emergency contact phone number clearly visible.
  - The crew has observed vehicular traffic traveling over the plates to verify that no banging, bouncing, shifting, warping, vibration, etc is taking place.



# Item 9 – Two 1½” Lifts of HMA

- All openings must be precut in a neat line using motorized wheel cutting, saw cutting, cold planing, or pneumatic chiseling
- Pavement edges shall be trimmed to a neat vertical face, free of loose materials and neatly aligned with the centerline of the trench.
- The shape of the pavement cut-outs shall be rectangular.
- All irregular shaped cuts or damaged pavement shall be repaired at the expense of the Permittee.

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, RTA, RMV, etc.  
☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Patch / Trench or Patch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ (Day of the week, Month, & Year) Weather/Temp: \_\_\_\_\_

	YES	NO	Notes	Violation
1. Current Permit Present?	n/a	YES NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a	YES NO		<input type="checkbox"/>
3. Safe Work Zone?	n/a	YES NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a	YES NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a	YES NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a	YES NO		<input type="checkbox"/> <small>visible ravel and loss?</small>
7. Controlled Density Fill (CDF)?	n/a	YES NO		<input type="checkbox"/>
8. Opening Secured?	n/a	YES NO		<input type="checkbox"/>
9. Two 1-1½" Lifts of Hot Mix Asphalt?	n/a	YES NO		<input type="checkbox"/> <small>visible ravel and loss?</small>
10. Final Paving Requirements	n/a	YES NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a	YES NO		<input type="checkbox"/> <small>IS ONLY INSPECTION</small>
12. Temp Sidewalk Acceptable?	n/a	YES NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a	YES NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a	YES NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a	YES NO		<input type="checkbox"/>
Damaged Loop Detectors, sensor cables, traffic signs, etc. in place?	YES	NO	Photo? YES NO	<input type="checkbox"/>
Public Safety Issue?	YES	NO		<input type="checkbox"/>
Violation Delivered?	YES	NO		<input type="checkbox"/>
Utility Rep. Connected?	YES	NO		<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

- A tac coat shall be painted to the pavement sidewalls of the entire excavation to prevent water infiltration.
- The asphalt cross-section is to be applied in two even lifts. **This is critically important to have a good smooth level patch.** Leave at least 1.5" of space between the base course and the grade of the road so the top crew can do a good job.
- The first lift must consist of 1.5" Boston dense binder or Boston modified top unless otherwise approved.
- The last lift must consist of 1.5" Boston top unless otherwise approved.
- Proper compaction equipment must be used.

# Utility Repair Tag Placement

- **Utility Repair Tags** are installed during the final lift of paving. **The tags must be pressed into the asphalt BEFORE compaction of the final lift commences.**
- The tags shall be imbedded at zero grade tolerance, or slightly below, and must be of one piece construction.
- The use of nails to secure tags is prohibited.



- On patches under one hundred linear feet in length ( $<100'$ ), a single tag must be placed in the center of the patch.
- On excavations that cross the entire street, tags must be placed along the center line to avoid wheel path traffic.
- For trenches greater than one hundred linear feet in length ( $>100'$ ), a tag must be placed at each end of the trench approximately 12" from the edge.
- For trenches that cross one or more intersections, a tag must be placed at each intersection in addition to at either end of the trench.
  - Each lateral cut extending from a trench that connects to individual private property will be considered part of that trench, and therefore will not be required to contain an additional Utility Repair Tags.

- When cast iron structures (manholes, water & gas gates, etc.) prohibit the tag from being placed in the center of the patch, the Permittee must place the tag as close to the center as possible keeping a distance of not less than 20" from the structure(s).
- **Where possible, tag placement should avoid wheel path traffic within the patch/trench area.**
- The color-coded Utility Repair Tags are NOT intended to identify underground utility infrastructure. The Utility Repair Tags are only to identify the Permittee who is responsible for maintaining the compliance of a temporary roadway patch.

Not Acceptable!!




Acceptable.



# Item 10 – Final Paving Requirements

Before any excavation patch will be approved by the PWD, the CIU inspector assigned will be looking for the following criteria:

- The roadway around the excavation is cut squared to provide an even edge for paving.
- Tac Coat has been applied to the sidewalls of the patch before paving.
- Utility Repair Tags are installed in every asphalt patch.
  - If there are multiple excavations, each excavation will require a tag.

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
\_\_\_\_\_ please specify complaint, RTA, RMHC, etc.  
☐ Inspection items not performed \_\_\_\_\_ Size of Cut on Permit: \_\_\_\_\_

ROADWAY OR SIDEWALK?  
Patch / Trench or Patch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ (Month, Day, Year) Weather/Temp: \_\_\_\_\_

	YES	NO	Notes	Violation
1. Current Permit Present?	n/a	YES NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a	YES NO		<input type="checkbox"/>
3. Safe Work Zone?	n/a	YES NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a	YES NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a	YES NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a	YES NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a	YES NO		<input type="checkbox"/>
8. Opening Secured?	n/a	YES NO		<input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt?	n/a	YES NO		<input type="checkbox"/>
10. Final Paving Requirements	n/a	YES NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a	YES NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a	YES NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a	YES NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a	YES NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a	YES NO		<input type="checkbox"/>
Public Safety Issue?	YES NO			<input type="checkbox"/>
Utility Rep. Connected?	YES NO			<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM



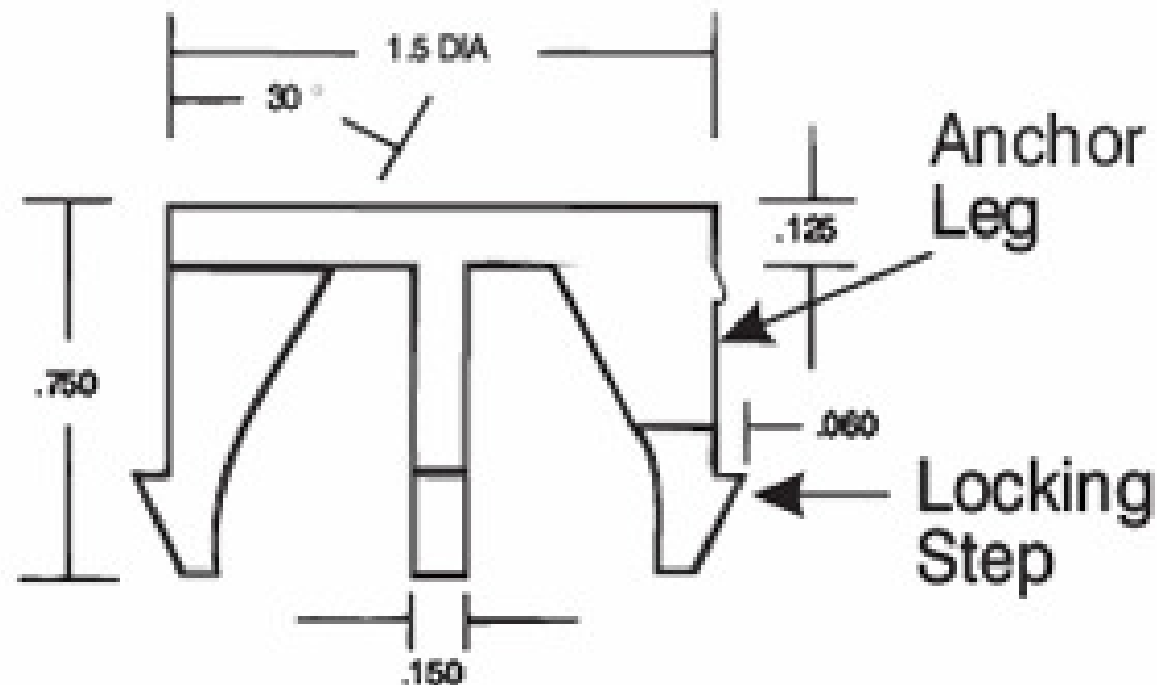
Over the past three years the Boston Public Works Department has witnessed an increase of unacceptable utility and private contractor patch and trench repairs.



The identification of every bad patch or trench requires research and additional resources from the BPWD and occasionally results in contractors being ordered to repair patches or trenches that are later identified as the responsibility of another utility or private contractor.

The Public Works Department believes the ability to clearly identify every patch or trench eliminates any ambiguity regarding utility repair ownership, and significantly reduce the time spent by the city and utilities/contractors to facilitate timely repairs.

### New Construction Tag





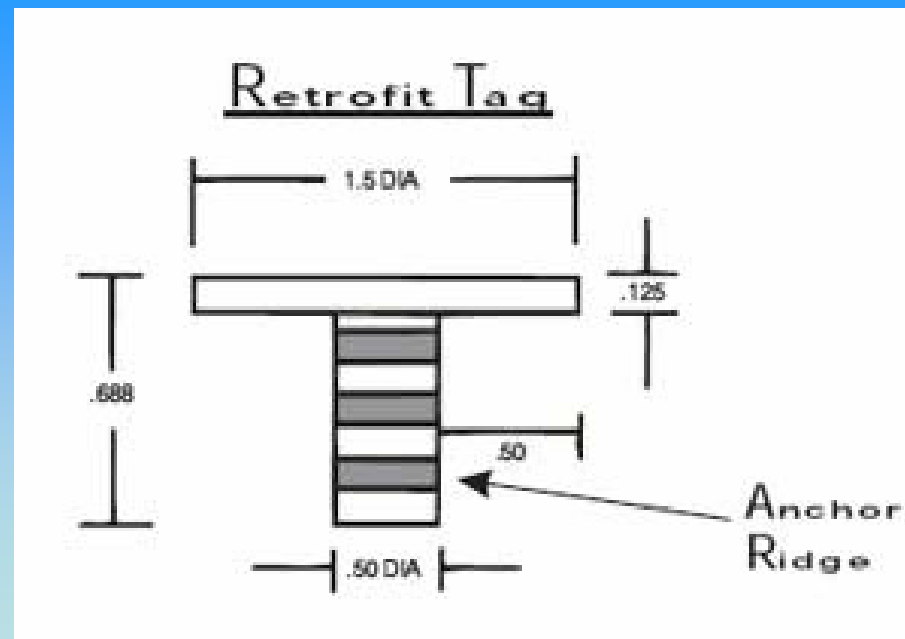
- 1) **Utility Repair Tags** must be circular, measuring not less than 1.5” in diameter, and not more than 3”.
- 2) **Utility Repair Tags** must be constructed of a UV-stable, durable material with at least three barbed legs extending from its lower surface (to hold the tag in the asphalt).
- 3) The face of the **Utility Repair Tag** must contain:
  - A - The two digit year (“12”, NOT “2012”) the patch was performed, located in the center of the tag.
  - B - The Permittee customer ID number, supplied by PWD, will be placed at the top of tag. Utility companies have the option of placing their name at the bottom of the tag.
  - C - Private Contractors must have their assigned individualized number on the bottom of their tag in addition to their customer ID at the top of the tag. This number will be designated to you by the PWD.
  - D - tags must be of the color assigned to your company.
- 4) **Any Permittee found not to be using the Utility Repair Tags will automatically be denied any new non-emergency permits, and all active jobs may be subjected to a shutdown.**

# Utility Repair Tag Warrantee

- The Permittee is responsible for replacing damaged or faded identification **Utility Repair Tags** throughout the three year guarantee period of a utility patch/trench repair.
- The Permittees will not be responsible for maintaining their patch/trench if the excavation is interrupted by another utility, or if the location is permanently repaired.

To replace a missing or damaged **Utility Repair Tag**, a specially modified tag is required. These modified tags are available by the distributor and contain a single post in the center of the base.

A  $\frac{1}{2}$  inch diameter hole is drilled  $\frac{3}{4}$  inches deep into the existing patch; the base of the modified tag is set into the hole and hammered securely into place with a soft mallet. It is very important that the tag fits securely into place as a loose tag will likely be disturbed or damaged by traffic.



# Item 11 – Roadway Satisfactorily Complete

- No. 11 – Final Product - smooth & level
- Consecutively from 2009 through 2011 the CIU have reported record numbers of Violations regarding the condition of utility and contractor patches.
  - Settled patches
  - Patches humped above grade
  - Not cut squared
  - Not smooth and level
  - Improper pavement material, etc.

**CITY OF BOSTON - PUBLIC WORKS DEPT**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTOR'S REPORT**

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
 (please specify complaint, STD, HWC, etc.)  
☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

**Roadway or Sidewalk?** \_\_\_\_\_  
 Patch / Trench or Patch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
 Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
 Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_

	Day of the week	Month	Yr	Time	Notes	Violation
1. Current Permit Present?	na	YES	NO			<input type="checkbox"/>
2. Abiding to Permit Restrictions?	na	YES	NO			<input type="checkbox"/>
3. Safe Work Zone?	na	YES	NO			<input type="checkbox"/>
4. Suitable Reused Gravel Material?	na	YES	NO			<input type="checkbox"/>
5. Suitable New Gravel Material?	na	YES	NO			<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	na	YES	NO			<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	na	YES	NO			<input type="checkbox"/>
8. Opening Secured?	na	YES	NO			<input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt?	na	YES	NO			<input type="checkbox"/>
10. Final Paving Requirements	na	YES	NO			<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	na	YES	NO			<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	na	YES	NO			<input type="checkbox"/>
13. Permanent Sidewalk Complete?	na	YES	NO			<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	na	YES	NO			<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	na	YES	NO			<input type="checkbox"/>
Public Safety Issue?	YES	NO				<input type="checkbox"/>
Violation Delivered?	YES	NO				<input type="checkbox"/>
Utility Rep. Contacted?	YES	NO				<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

From 2010 to 2011, the unacceptable rating went from **6.81%** to **13.16%**

# Continued Disappointment

- The Public Works Department is deeply disappointed by the clear lack of effort exhibited by many of your crews regarding the compaction and paving of your excavation patch repairs.
- To address this issue the CIU will explore the possibility of requiring that a particular Permittee who exhibits a continued disregard of the City's Rules and Specifications be required to have a CIU Inspector present for every backfill.
- If that company performs emergency work after 4:00pm during the week, or on a weekend, they may be required to plate the excavation until such a time that a CIU Inspector can be assigned to their site the following work day.
- The CIU reserves the right to require any Permittee to perform compaction testing (Nuclear Density) at the cost of the Permittee.



# You Need Improvement!

<b>Non Compliance Decline</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Overall</b>	<b>2.56%</b>	<b>1.40%</b>	<b>0.80%</b>	<b>0.65%</b>	<b>1.29%</b>	<b>1.91%</b>
<b>Opening Secured</b>	<b>5.58%</b>	<b>3.26%</b>	<b>1.81%</b>	<b>1.24%</b>	<b>1.19%</b>	<b>2.58%</b>
<b>Final Paving Product</b>	<b>4.76%</b>	<b>3.34%</b>	<b>2.20%</b>	<b>3.10%</b>	<b>6.81%</b>	<b>13.16%</b>

Every bad patch that needs to be repaired due to poor construction practices is money out of your company's pocket. Do work right the first time for your own benefit!

# Unacceptable Patch Repair

- The PWD is extremely disappointed in the number of unacceptable bad patch locations identified in 2012.
- PWD will strictly enforce the requirement that repairs to unacceptable patches must be made within 7-13 days of notification.
  - Permittees who do not repair their unacceptable patch locations within the required notification period will not be issued any PWD permits until the work is done.
  - The City will not issue permits to any entity who has pending unrepaired bad patches.
- In addition to tracking bad patches, the City has been recording sidewalk locations left in HMA after the 60 day repair requirement.

- The PWD will take all necessary steps to assure the roadways remain safe for travel.
  - The PWD will offer one-on-one training of the Rules and Specifications for any company who feels they could benefit from further instruction.
- You will be notified immediately of all patches Permitted by your company that have settled 2" or more. After your company acknowledges the patch is yours, or if 48 hours pass without a response, you will be required to repair the patch ASAP and provide the following information:
  - A detailed explanation submitted to the CIU explaining the reason for the failure (wet or bad material, improper compaction, >8" lifts, etc).
  - A Guarantee that the crew(s) responsible will be notified & educated about their error.
  - If the patch is not repaired 7-13 days after notice, Permits will be shut down.

# Item 11 – Foreman Check List

- Before the final paving has taken place, the Foreman must have performed the following:
  - The pavement cut has been squared off with vertical sidewalls in neat, straight lines.
  - The pavement sidewalls are clear of debris and have had a tack coat applied.
  - The crew has a supply of both HMA Binder and Top.
  - Proper compaction equipment is available, and used (mechanical roller, plate compactor, etc).
- The end product must be smooth and level to the grade of the pre-existing roadway.


# See the Difference?





# Items 12 – Temporary Sidewalk

- Temporary Sidewalk repair to be made immediately
  - MA AAB/ADA compliant
    - Sidewalk cross slope must not exceed 2% (Strive for 1.5%)
    - Ramp cross slope must not exceed 8.3% (Strive for 7.5%)
  - Maintain a compliant temporary passageway of a minimum of 4' around construction area (See BTM Traffic Management Plan)
  - If unable to maintain minimum 4' passageway, the Permittee must provide (2) two *MUTCD R9-10* "Sidewalk Closed – Use Other Side" signs on either side of the site at the nearest intersecting pedestrian ramps.
  - 3" HMA installed in 2 even Lifts

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, BTM, HMA, etc.  
☐ Inspection items not performed Size of Cut on Panel: \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Pavch / Trench or Pavch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

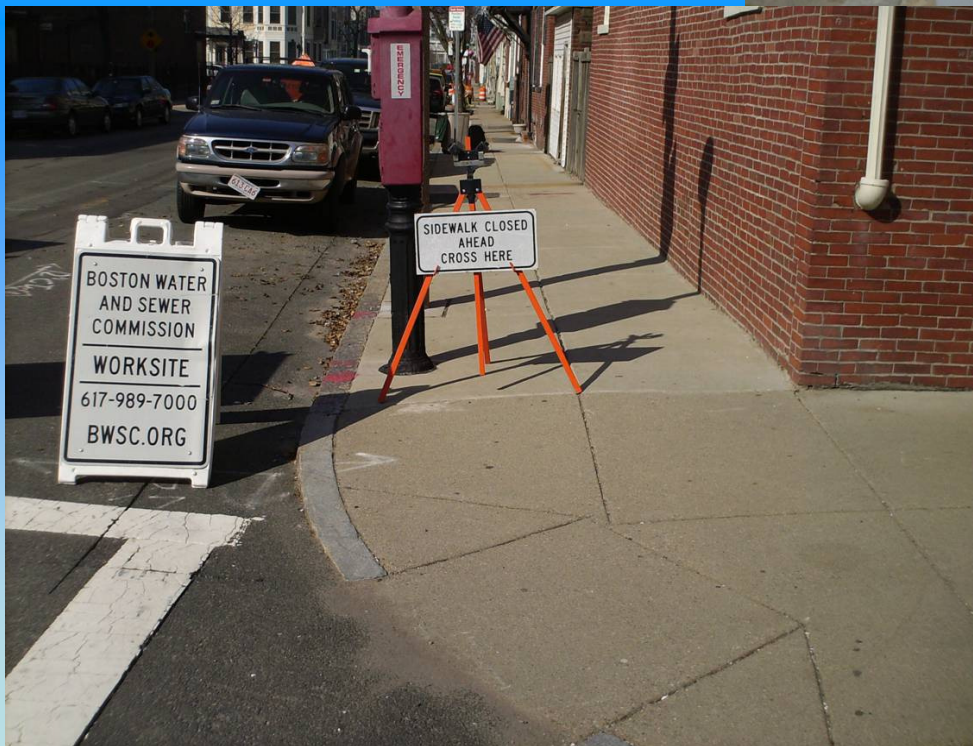
	Notes	Violation
1. Current Permit Present? <small>(Is permit current? Call to log it?)</small>	na YES NO	<input type="checkbox"/>
2. Abiding to Permit Restrictions? <small>(Turning traffic? Police Detail? Work Hours? Stopping? Proper Signage?)</small>	na YES NO	<input type="checkbox"/>
3. Safe Work Zone? <small>(Storing? Guarding? etc.)</small>	na YES NO	<input type="checkbox"/>
4. Suitable Reused Gravel Material? <small>(Was the material tested prior to use?)</small>	na YES NO	<input type="checkbox"/>
5. Suitable New Gravel Material? <small>(Tested material? Evaluation test on file?)</small>	na YES NO	<input type="checkbox"/>
6. Compacted in 2" Maximum Lifts? <small>(6 of lifts, 10 maximum type of inspection, 8 of passes?)</small>	na YES NO	<input type="checkbox"/> <small>visible ravel and loose</small>
7. Controlled Density Fill (CDF)? <small>(Authorized by PW 21? Material specific specifications?)</small>	na YES NO	<input type="checkbox"/>
8. Opening Secured? <small>(Steel Plates? Reuse of or New 6' Cold patch (GPR), NO gravel)</small>	na YES NO	<input type="checkbox"/> <small>visible ravel and loose</small>
9. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>(If used, 100% covered by seal surface, 5000' minimum)</small>	na YES NO	<input type="checkbox"/>
10. Final Paving Requirements <small>(Cut Slopes 4:1-10:1 Marked Proper, Two Coat Applied)</small>	na YES NO	<input type="checkbox"/>
11. Roadway Satisfactorily Complete? <small>(Signage, acceptable smoothness and level? Is it suitable?)</small>	na YES NO	<input type="checkbox"/> <small>NO ONLY INSPECTION</small>
12. Temp Sidewalk Acceptable? <small>(Marked ADA? All 8 requirements? (max 2% cross slope) permanently marked within 30 days?)</small>	na YES NO	<input type="checkbox"/>
13. Permanent Sidewalk Complete? <small>(Marked ADA? All 8 requirements? (max 2% cross slope)</small>	na YES NO	<input type="checkbox"/>
14. Pedestrian Ramp Compliant? <small>(Marked ADA? All 8 requirements? (8.3% max or 7.5% or less preferred) marking slope on ramp? max 2% cross slope for all directions of travel)</small>	na YES NO	<input type="checkbox"/>
15. Loop Detectors / Pavement Markings? <small>(Damaged loop detectors, correct only, traffic signs, etc. in place?)</small>	na YES NO	<input type="checkbox"/>
Public Safety Issue?	YES NO	<input type="checkbox"/>
Defective Item? Describe:		
Violation Delivered? YES NO	Photo? YES NO	SHUTDOWN <input type="checkbox"/>
Utility Rep. Contacted? YES NO		
Comments: _____		
Inspected by: _____ Signature: _____ Date: _____		
* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM		

# Not Acceptable!






# Acceptable.



# Items 13 – Permanent Sidewalk

- Permanent repair to be made within 60 days of temporary repair
  - Abide by City material/installation specs.
  - Edge stone to be reset within area of repair.
  - Must notify City before PCC work takes place.
  - MA AAB/ADA compliant (see Item 12)
  - If any portion of an existing pedestrian ramp is disturbed by construction, Permittee shall be required to reconstruct the ramp to current ADA/AAB regulations.
  - Permittee not responsible for AAB reciprocal provision.
- Utilities must maintain database of sidewalk restoration locations.

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, STD, HWC, etc.  
☐ Inspection items not performed Size of Cut on Panel: \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Pavch / Trench or Pavch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

	Notes	Violation
1. Current Permit Present?	n/a YES NO	<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a YES NO	<input type="checkbox"/>
3. Safe Work Zone?	n/a YES NO	<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a YES NO	<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a YES NO	<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a YES NO	<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a YES NO	<input type="checkbox"/>
8. Opening Secured?	n/a YES NO	<input type="checkbox"/>
9. Two 4-1/2" Lifts of Hot Mix Asphalt?	n/a YES NO	<input type="checkbox"/>
10. Final Paving Requirements	n/a YES NO	<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a YES NO	<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a YES NO	<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a YES NO	<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a YES NO	<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a YES NO	<input type="checkbox"/>
Public Safety Issue?	YES NO	<input type="checkbox"/>
Violation Delivered?	YES NO	<input type="checkbox"/>
Utility Rep. Contacted?	YES NO	<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

# Brick Sidewalk Repairs

- The CIU reports show that many Permittees performed unacceptable brick work in the past couple of years.
  - Every Permittee must have a competent crew that specializes in brick restoration.
- All Permittees will be responsible for adjusting any edge stone within the limits of the sidewalk repair.
- Proper material and testing requirements must be met.
  - Material and specifications are available on the PWD website.



- All Permittees will be required to provide the CIU with the repair schedule of sidewalk locations 48 hours before performing the work.

All notifications must be sent via email to

[Mark.Cardarelli@cityofboston.gov](mailto:Mark.Cardarelli@cityofboston.gov);

[Michael.Kinson@cityofboston.gov](mailto:Michael.Kinson@cityofboston.gov);

[Edward.Hesford@cityofboston.gov](mailto:Edward.Hesford@cityofboston.gov); and

[Sarah.Braeu@cityofboston.gov](mailto:Sarah.Braeu@cityofboston.gov);

- If your company is unable to contact the CIU through email, you may call 617-635-4950
- **Each month the CIU will provide all Permittees a list of overdue (beyond 60 days) permitted sidewalk locations requiring permanent repair.**
- **Upon receipt of this list all Permittees will have 7 days to acknowledge ownership (via email) and present a planned schedule for restoration to the PWD.**
- **If overdue restorations are not completed within 30 days, PWD will deny all new permit requests.**
- **All Permittees must be vigilant regarding the impact to, and safety of, pedestrians during construction.**

# Items 12 & 13 – Foreman Check List

- Does your permit allow for sidewalk work?
- Has the CIU been notified at least 48 hours in advance?
- If access to the sidewalk will be affected, do you have approved sidewalk closed signs?
  - Signs must be placed at the nearest pedestrian ramp on either side of the construction.
- For work on the sidewalk where Pedestrian access is not blocked is there at least 4 feet of access/
  - All sidewalk work must have approved MUTCD barricades in place.
- Any edge stone within your permanent restoration limits must be reset, even if it was not damaged due to your work.
- Are you using approved material?
  - All excavated sidewalk material must be repaired in kind.
- All temporary and permanent sidewalk repairs must meet ADA/AAB slope requirements.

# Item 14 – Permanent Ramp Compliance

- If any portion of a Pedestrian Access Ramp is disturbed, including the landing or abutting edge stone, the ramp becomes the responsibility of the Permittee for repair.
- All unacceptable ramps must be replaced to ADA/AAB specifications with appropriate cross slope requirements.
  - 8.3% max running slope on ramp with 7.5% or less preferred
  - Max 2% cross slope in all directions of level landing

**CITY OF BOSTON - PUBLIC WORKS DEPT**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTORS REPORT**

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, STD, RMC, etc.

☐ Inspection items not performed Size of Cut on Ramp? \_\_\_\_\_

**PERMIT #:** \_\_\_\_\_ **Permittee:** \_\_\_\_\_ **Roadway or Sidewalk?** \_\_\_\_\_  
**Address:** \_\_\_\_\_ **Contractor:** \_\_\_\_\_ **Patch / Trench or Patch / Trench** \_\_\_\_\_ **Depth?** \_\_\_\_\_  
**Street:** \_\_\_\_\_ **Foreman:** \_\_\_\_\_ **Phone:** \_\_\_\_\_  
**Neighborhood:** \_\_\_\_\_ **Time From:** \_\_\_\_\_ **To:** \_\_\_\_\_ **Total Hours:** \_\_\_\_\_  
from time worked

**Date:** \_\_\_\_\_ **Weather/Temp:** \_\_\_\_\_  
Day of the week, Month, A, Year

	YES	NO	Notes	Violation
1. Current Permit Present?	n/a	YES NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a	YES NO		<input type="checkbox"/>
3. Safe Work Zone?	n/a	YES NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a	YES NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a	YES NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a	YES NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a	YES NO		<input type="checkbox"/>
8. Opening Secured?	n/a	YES NO		<input type="checkbox"/>
9. Two 4-1/2" Lifts of Hot Mix Asphalt?	n/a	YES NO		<input type="checkbox"/>
10. Final Paving Requirements	n/a	YES NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a	YES NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a	YES NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a	YES NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a	YES NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a	YES NO		<input type="checkbox"/>
Public Safety Issue?	YES NO			<input type="checkbox"/>
Violation Delivered?	YES NO			<input type="checkbox"/>
Utility Rep. Contacted?	YES NO			<input type="checkbox"/>


**Comments:** \_\_\_\_\_

**Inspected by:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM

# Item 15 – Pavement Markings & Loop Detectors

- Loop detectors, pavement markings, signage etc.
- Partial damage to crosswalks results in complete restoration.
- **Public's Safety possibly compromised**
- Damaged pavement markings must be replaced no later than 72 hours after completion of work.
- Permittees must internally track locations needing pavement markings and loop detector replacing

 CITY OF BOSTON - PUBLIC WORKS DEPT  
CONSTRUCTION MANAGEMENT DIVISION  
UTILITY STREET OPENING REPAIR  
INSPECTOR'S REPORT

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complete, RTA, RMHC, etc.  
☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

Roadway or Sidewalk? \_\_\_\_\_  
Pavch / Trench or Pavch / Trench \_\_\_\_\_ Depth? \_\_\_\_\_

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
Address: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
Street: \_\_\_\_\_ Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

	YES	NO	Notes	Violation
1. Current Permit Present?	n/a	YES NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions?	n/a	YES NO		<input type="checkbox"/>
3. Safe Work Zone?	n/a	YES NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material?	n/a	YES NO		<input type="checkbox"/>
5. Suitable New Gravel Material?	n/a	YES NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts?	n/a	YES NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)?	n/a	YES NO		<input type="checkbox"/>
8. Opening Secured?	n/a	YES NO		<input type="checkbox"/>
9. Two 4-1/2" Lifts of Hot Mix Asphalt?	n/a	YES NO		<input type="checkbox"/>
10. Final Paving Requirements	n/a	YES NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete?	n/a	YES NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable?	n/a	YES NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete?	n/a	YES NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant?	n/a	YES NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings?	n/a	YES NO		<input type="checkbox"/>
Public Safety Issue?	YES	NO		<input type="checkbox"/>
Violation Delivered?	YES	NO	Photo? YES NO	SHUTDOWN <input type="checkbox"/>
Utility Rep. Connected?	YES	NO		

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM



# Pavement Markings

- Pavement Markings on Arterials must have temporary tape applied before the required 72 hour permanent replacement application.
- **The BTD and the CIU have increased their vigilance regarding Disrupted Pavement Markings.**
- Pavement Markings that have been impacted by a Permittee and not repaired within the required period of time may compromise the public's safety.
- **Patches or trenches without the required pavement markings are an incomplete product. This conveys to the public that City and the Permittees are not doing the job “right”.**
- Disrupted pavement markings are now added to the “Bad Patch” listing.

# Loop Detectors

- Contractors shall notify the BTM Traffic Management Center (617-635-4430), at least 48 hours prior to starting any construction that will impact loop detector/signal operations.
- Contractors shall replace loop detectors within 72 hours of completion of work, and notify the BTM Traffic Management Center to schedule a traffic signal inspection of the intersection.
- Loop detectors shall be replaced by a BTM approved traffic signal contractor in accordance with BTM specifications.

# Bike Lanes

- Boston Bikes is part of the Mayor Menino's vision for a vibrant and healthy city that benefits all its citizens.
  - Since 2007 the City has increased the number of bike lanes throughout Boston dramatically.
  - New bike lanes are added each year.
- All bike lane routes will now be submitted through the COBUCS system.
- On any proposed utility or contractor work in conflict with completed bike lanes in the COBUCS program, the Permittee MUST coordinate with the BTD Engineering Department to review plans and determine whether or not the project will disrupt any bike lane markings.

# Bike Lanes Continued

- The Public Works Department will not release a COBUCS entry in conflict with completed bike lane markings until either receiving confirmation by the BTB that your work does not interrupt the pavement markings, or until your company provides a copy of sketching detailing the replacement of the bike lane(s).
- All bike lane markings must be replaced within 3 days of completion of work.
- **Any steel roadway plate(s) located within a bike lane must have a skid resistant coating applied for the safety of the riders.**





06/23/2010



# Public Safety

- Signals an egregious disregard for City Rules and Specifications
- Will result in meeting/shutdown
- Possibility of all active work zones being shut down (Excluding Emergency work)
- Public Safety violations will be taken into account during Winter Moratorium requests.
- The City of Boston keeps record of ALL violations against the Rules and Specifications.
- Such violations are taken into consideration, especially in regard to public safety, in the Permit Application Process.

**CITY OF BOSTON - PUBLIC WORKS DEPT**  
**CONSTRUCTION MANAGEMENT DIVISION**  
**UTILITY STREET OPENING REPAIR**  
**INSPECTORS REPORT**

☐ Normal CIU Inspection ☐ Other Inspection \_\_\_\_\_  
please specify complaint, RTA, RMV, etc.

☐ Inspection items not performed Size of Cut on Permit: \_\_\_\_\_

**Roadway or Sidewalk?**  
 Patch / Trench or Patch / Trench Depth?

PERMIT #: \_\_\_\_\_ Permittee: \_\_\_\_\_ Contractor: \_\_\_\_\_  
 Address: \_\_\_\_\_ Street: \_\_\_\_\_ Foreman: \_\_\_\_\_ Phone: \_\_\_\_\_  
 Neighborhood: \_\_\_\_\_ Time From: \_\_\_\_\_ To: \_\_\_\_\_ Total Hours: \_\_\_\_\_  
 Date: \_\_\_\_\_ Weather/Temp: \_\_\_\_\_  
Day of the week, Month, A, Year

	YES	NO	Notes	Violation
1. Current Permit Present? <small>Is permit current? Call to log it?</small>	n/a	YES NO		<input type="checkbox"/>
2. Abiding to Permit Restrictions? <small>Turning traffic? Police Detail? Work Hours? Stopping? Proper Signage?</small>	n/a	YES NO		<input type="checkbox"/>
3. Safe Work Zone? <small>Warning? Guardrail or safety cone?</small>	n/a	YES NO		<input type="checkbox"/>
4. Suitable Reused Gravel Material? <small>Was the material tested prior to use?</small>	n/a	YES NO		<input type="checkbox"/>
5. Suitable New Gravel Material? <small>Tested material? Gravel test on file?</small>	n/a	YES NO		<input type="checkbox"/>
6. Compacted in 8" Maximum Lifts? <small>6 of lifts, 10 maximum type of equipment used, 8 of passes?</small>	n/a	YES NO		<input type="checkbox"/>
7. Controlled Density Fill (CDF)? <small>Authorized by PW 21? Water test results specified?</small>	n/a	YES NO		<input type="checkbox"/>
8. Opening Secured? <small>Steel Plates Reused or New 6, Cold patch (Glow), NO gravel</small>	n/a	YES NO		<input type="checkbox"/>
9. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>1" cold bitumen, graded to road surface, 5000' 10/10/08</small>	n/a	YES NO		<input type="checkbox"/>
10. Final Paving Requirements <small>Call Report A, A-10.5 Marking Placed, Two Coat Applied</small>	n/a	YES NO		<input type="checkbox"/>
11. Roadway Satisfactorily Complete? <small>Grading, 8-compaction, Smooth and level? Or Unacceptable</small>	n/a	YES NO		<input type="checkbox"/>
12. Temp Sidewalk Acceptable? <small>Marked CDF, All 8" compacted? (max 2% cross slope)? Permanently replaced within 90 days?</small>	n/a	YES NO		<input type="checkbox"/>
13. Permanent Sidewalk Complete? <small>Marked CDF, All 8" compacted? (max 2% cross slope)?</small>	n/a	YES NO		<input type="checkbox"/>
14. Pedestrian Ramp Compliant? <small>Marked CDF, All 8" compacted? (5.7% or as 1.7.3% or less preferred) turning slope on ramp? max 2% cross slope for all directions of travel?</small>	n/a	YES NO		<input type="checkbox"/>
15. Loop Detectors / Pavement Markings? <small>Highlighted loop detectors, correct data, traffic lights in place?</small>	n/a	YES NO		<input type="checkbox"/>
Public Safety Issue?	YES NO			<input type="checkbox"/>
Violation Delivered?	YES NO	Photo? YES NO		<input type="checkbox"/>
Utility Rep Contacted?	YES NO			<input type="checkbox"/>

Comments: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\* Normal CIU working hours Monday-Friday 7:30 AM - 4:00 PM






# Winter Moratorium

- November 15 – April 15 (approx)
- Materials & workmanship negatively effected by cold weather.
- No permits issued without city approval.
- Plated locations hazard to City plowing efforts.



# Violation Sheet

- Issued to crew on active work sites. For inactive sites, the CIU maintains a copy of the Violation and a notice is sent.
- Sites section/article from City Rules & Specifications

 <b>VIOLATION</b>	
<b>CITY OF BOSTON PUBLIC WORKS DEPARTMENT</b>	
<b>RULES AND SPECIFICATIONS FOR EXCAVATION WITHIN THE CITY OF BOSTON</b>	
February 17 <sup>th</sup> , 2006 Edition	
<input type="checkbox"/> 1. Current Permit Present	
o Section 4.09, Article A 2	Working without a permit Page 29
o Section 4.09, Article A 2	Working with an expired permit Page 29
o Section 4.09, Article A 2	Current permit not on site Page 29
o Section 1.01, Article L	No Call-in Page 6
<input type="checkbox"/> 2. Abiding to Permit Restrictions	
o Section 3.10, Article M	No Ground ID sign(s) Page 16
o Section 3.07, Article C	Not maintaining 2-way traffic Page 14
o Section 3.07, Article C	No Police Detail Page 14
o Section 3.07, Article C	Unauthorized stockpiling Page 14
o Section 3.07, Article C	Working outside LTD time restrictions Page 14
<input type="checkbox"/> 3. Safe Work Zone	
o Section 3.10, Article G	Unsafe work zone Page 16
o Section 3.10, Article I	Work zone not clean and/or swept Page 16
o Section 4.02, Article C	No shoring or inadequate shoring where required Page 19
<input type="checkbox"/> 4. Suitable Reused Gravel Material	
o Section 4.04, Article J	Use of untested excavated material Page 22
<input type="checkbox"/> 5. Suitable New Gravel Material	
o Section 4.08, Article A	Not MHD M1.03.1 approved process gravel for sub-base Page 27
<input type="checkbox"/> 6. Compacted in 8" Maximum Lifts	
o Section 4.04, Article I	Not compacting in eight (8") lifts Page 22
o Section 4.04, Article I	Failure to achieve 95% laboratory maximum dry density Page 22
o Section 4.04, Article K	No control test strip for equipment achieving lifts greater than 8" Page 22
<input type="checkbox"/> 7. Controlled Density Fill (CDF)	
o Section 4.05, Article A	CDF usage is unapproved Page 23
<input type="checkbox"/> 8. Opening Secured	
o Section 4.03, Article A	Steel plate(s) unsecured; (movement/bending/vibration/loud banging etc.) Page 20
o Section 4.03, Article B	Steel plate(s) not completely covering open excavation with minimum 18" overlap Page 20
o Section 4.03, Article D	Steel plate(s) with no company name and/or phone number Page 20
o Section 4.03, Article E 1	Steel plate(s) not recessed where required Page 20
o Section 4.03, Article E 2	Steel plate(s) not bermed properly Page 20
o Section 4.03, Article E 5	No explanation in writing when steel plates cannot be recessed Page 20
o Section 4.06	Roadway opening left in gravel Page 23
o Section 5.05	Cold patch in street opening not replaced with HMA within 48 hours Page 23
o Section 5.05	Sidewalk opening left in gravel Page 40
o Section 5.05	Cold patch in sidewalk opening not replaced with HMA within 48 hours Page 40

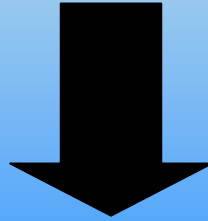
  

UTILITY NAME _____	PERMIT # _____
LOCATION _____	DATE _____
VIOLATION SECT. _____	SIGNATURE _____

City of Boston Public Works  
Violation Page 1 of 2



# Noncompliance Rating



$$\left( \frac{\text{SUM OF VIOLATIONS}}{\text{SUM OF INSPECTION ITEMS}} \right)$$

$0.00\% \leq \text{Good} < 0.50\%$

$0.50\% \leq \text{Fair} < 1.00\%$

$1.00\% \leq \text{Needs Improvement} < 1.50\%$

$\geq 1.50\% \text{ Poor}$

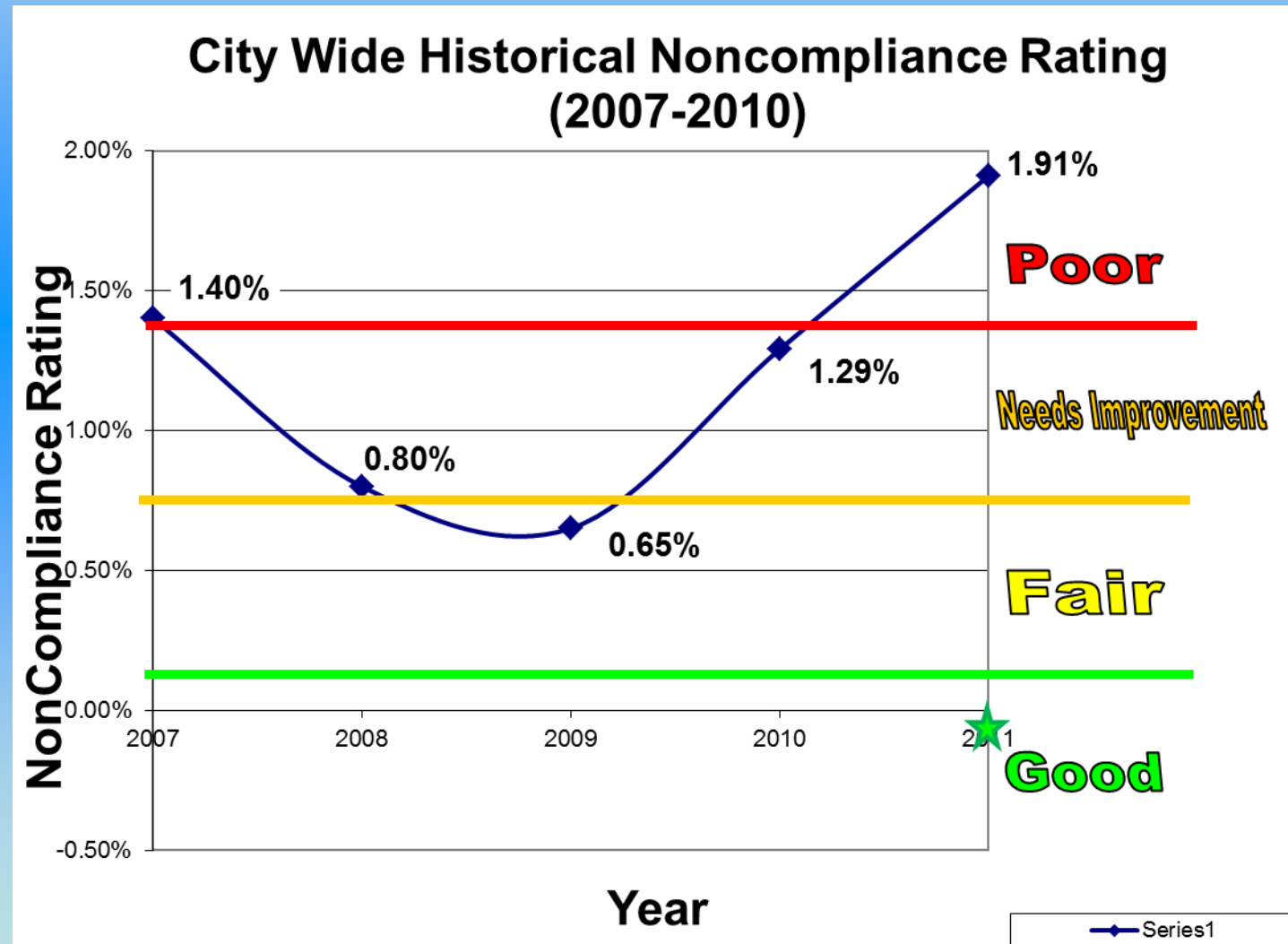
**Scale developed from historical data  
as collected by CIU inspections**

# NonCompliance Adjustment

Since 2010  
the overall  
Non-  
Compliance  
rating has  
increased  
dramatically!

This is an  
unacceptable  
trend that  
needs to be  
addressed  
immediately.

## Historical Rating Record



# Cooperative Effort

In 2007 the BPWD began weekly transmissions of rating summaries (Report Cards) to major utilities..

- Valuable tool for City & utilities.
- Provides comparison to citywide average.
- We welcome feedback.

# CIU Weekly Report Card Update

## City of Boston leading the way...

*Cover sheet w/ explanation & # of inspections*

**CITY OF BOSTON**  
PUBLIC WORKS DEPARTMENT

**Weekly Update for NSTAR Electric**

This report represents a summary of your utility construction performance as assessed by the Boston Public Works Construction Unit (CUI) during the time period of 10/1/2007 to 10/30/2007.

Inspections are performed using a standard fifteen item report which evaluates key construction items based on Public Works Department rules and specifications. The items address the conventional process of street excavation, digging, excavation, backfilling, paving, and also monitor permit restrictions and safety. Inspections are made throughout the life of the job, and not all items are relevant during a particular visit. When found in non-compliance with a particular inspection item, the CUI will issue a violation to the effect. During the time period of this report, the CUI has visited your street the following number of times:

# Of Site Visits = 118

From the data obtained by these reports, the CUI maintains a non-compliance rating to quantify the performance of companies working in the public way. The rating is calculated and scored using the following system:

**Noncompliance Rating Percentage =  $\frac{\text{SUM OF VIOLATIONS}}{\text{SUM OF INSPECTION ITEMS}}$**

**Rating Scale %**  
0.0% ± GOOD ± 0.0%  
0.0% ± FAIR ± 1.5%  
1.5% ± NEEDS IMPROVEMENT ± 2.0%  
2.0% ± POOR

In this report your rating is analyzed by inspection item to allow for identification of weak points in construction. Citable averages are provided for comparison purposes. Also, we have included a year-to-date rating summary for progress tracking purposes. Violations issued during the aforementioned period (if any), are listed with their description and location. The first week of each month we will provide you with the previous month's rating.

If at any time a non-compliance rating should rise above 2.00% you will be required to attend a meeting with CUI representatives to discuss overall construction practices. To prevent further action by the city, an acceptable level of improvement must result from such a meeting. Elevated violation levels of a particular inspection item will result in a similar process regardless of overall rating.

Should you have questions or comments related to this or any other CUI procedures, do not hesitate to contact the Boston Public Works Highway Department at 617-634-5450. It is our hope that this weekly update will be used as a tool to improve utility construction in the city.

The Boston Public Works believes that utility companies can function as our partners in the difficult job of maintenance and upgrade of Boston's infrastructure.

We thank you for your continued cooperation.

Mark Cardarelli  
Chief Inspector  
Construction Inspection Unit (CUI)  
Boston Public Works Department

Daily Date 11/20/07 Page 1/41

**Weekly Update for NSTAR Electric**

Inspection Item	# of Violations	# of Inspections	Weekly Compliance Rating	Year-to-Date Compliance Rating	Year-to-Date Compliance Rating
1. Current Permit Present?	45	0	0.00%	0.35%	0.78%
2. Abiding to Permit Restrictions?	45	0	0.00%	0.35%	0.78%
3. Safe work Zone?	47	0	0.00%	0.00%	0.00%
4. Suitable Roadway/Gravel Material?	0	0	0.00%	0.00%	0.00%
5. Suitable New Gravel Material?	13	0	0.00%	1.55%	0.00%
6. Compacted in 8" Maximum Lifts?	10	0	0.00%	0.00%	0.00%
7. Controlled Density Fill (CDF)?	0	0	0.00%	0.00%	0.00%
8. Opening Secured?	42	1	1.01%	1.01%	2.01%
9. Edges Straight and Vertical?	11	0	0.00%	0.00%	1.71%
10. Two 1-1/2" Lifts of Hot Mix Asphalt?	3	0	0.00%	0.00%	0.00%
11. Roadway Satisfactorily Completed?	12	0	0.00%	4.17%	3.00%
12. Temp Sidewalk Completed?	7	1	14.29%	3.25%	2.00%
13. Permanent Sidewalk Completed?	3	0	0.00%	0.00%	10.10%
14. Loop Detectors/Crosswalks?	1	0	0.00%	0.00%	24.24%
15. Public Safety Issues?	0	0	0.00%	0.00%	0.00%

Overall Noncompliance Rating = 0.77% 1.81% 1.80%

**Rating Scale %**  
0.0% ± GOOD ± 0.0%  
0.0% ± FAIR ± 1.5%  
1.5% ± NEEDS IMPROVEMENT ± 2.0%  
2.0% ± POOR

Daily Date 11/20/07 Page 1/41

*Rating Summary Sheet*

**Weekly Update for NSTAR Electric**

DATE: 10/30/07

REPORT BY: [Name]

LOCATION: [Location]

CONTRACTOR: [Contractor Name]

VIOLATION SUMMARY:

DESCRIPTION:

CONTRACTOR'S RESPONSE:

Daily Date 11/20/07 Page 1/41

*Individual Violations*

**Weekly Update for NSTAR Electric**

VIOLATION	DESCRIPTION	LOCATION	DATE
1	Current Permit Present?	10/30/07	10/30/07
2	Abiding to Permit Restrictions?	10/30/07	10/30/07
3	Safe work Zone?	10/30/07	10/30/07
4	Suitable Roadway/Gravel Material?	10/30/07	10/30/07
5	Suitable New Gravel Material?	10/30/07	10/30/07
6	Compacted in 8" Maximum Lifts?	10/30/07	10/30/07
7	Controlled Density Fill (CDF)?	10/30/07	10/30/07
8	Opening Secured?	10/30/07	10/30/07
9	Edges Straight and Vertical?	10/30/07	10/30/07
10	Two 1-1/2" Lifts of Hot Mix Asphalt?	10/30/07	10/30/07
11	Roadway Satisfactorily Completed?	10/30/07	10/30/07
12	Temp Sidewalk Completed?	10/30/07	10/30/07
13	Permanent Sidewalk Completed?	10/30/07	10/30/07
14	Loop Detectors/Crosswalks?	10/30/07	10/30/07
15	Public Safety Issues?	10/30/07	10/30/07

Daily Date 11/20/07 Page 1/41

*Bad Patch Locations*



# Enforcement

- **Zero Tolerance on individual work zones established in 2006 by Mayor Menino on critical violation(s)**
  - Immediate jobsite shutdown/meeting at city hall
- The City has cannot allow mediocre work to continue marring the public ways without repercussion.
  - Overall non-compliance rating > 1.50% - managers called for a meeting to discuss the crew's construction practices and how to improve.
  - No improvement will result in a citywide non-emergency shutdown of permits and a meeting will be scheduled in City Hall.
  - Continued lack of improvement shall result in another shutdown and require that the highest representatives of the company meet with Commissioner Massaro and the Mayor's office to discuss overall construction practices.
  - Elevated individual items (e.g. Plates) will result in similar shutdown procedures.
  - The Permittee shall be held accountable for any actions performed by its personnel. If the personnel of a Permittee is cited for three shutdown meetings for the same inspection item, the Permittee will bear equal responsibility.

**Mayor Thomas Menino takes Public Safety Seriously!!**

# Enforcement Continued

“Bad Patch” – procedure must be followed

- Identified by CIU as “unacceptable” under Items 11, 12, & 13
- Utility Contractor Notified by EMAIL or PHONE
- Utility has 48 hrs to confirm or contest
  - Contested patches on hold until field meeting
  - Confirmed have until end of following week to repair
    - No communication results as “conformation” of ownership
- **Failure to address bad patches result in suspension of permits**
- **Public Safety locations require immediate response**
- Report Card - Tool used for self evaluation
- **No New Service Requests will be issued until all existing bad patches have been repaired as required.**

# 2009 Year End Performance

## Contractor/Utility Noncompliance Rating

1/1/2009 to 12/31/2009

Inspection Item	City Wide	State/Muni.	Private Contractors	Utilities	National Grid	NSTAR E	NSTAR G	Comcast	Trigen	Verizon
1. Current Permit Present? <small>Is permit current? Call-in logged? Proper Signage?</small>	0.49%	0.22%	0.42%	0.57%	0.77%	0.22%	0.00%	0.00%	0.00%	0.40%
2. Abiding to Permit Restrictions? <small>Two-way traffic? Police Detail? Work Hours? Stockpiling?</small>	0.22%	0.45%	0.15%	0.17%	0.25%	0.00%	0.00%	0.00%	0.00%	0.00%
3. Safe work Zone? <small>Shoring? Guarded workzone? Ex. cones, barrels, tape etc.</small>	0.08%	0.28%	0.15%	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%
4. Suitable Reused Gravel Material? <small>Was the material tested prior to use?</small>	0.00%	0.00%	0.00%	0.00%	0.00%			0.00%		
5. Suitable New Gravel Material? <small>Tested material? Gradation test on file?</small>	0.05%	0.00%	0.31%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6. Compacted in 8" Maximum Lifts? <small># of lifts; lift thickness; type of equipment used; # of passes</small>	0.49%	4.58%	0.30%	0.14%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%
7. Controlled Density Fill (CDF)? <small>Proper Use of CDF?</small>	0.00%		0.00%	0.00%	0.00%	0.00%			0.00%	
8. Opening Secured? <small>Steel Plates Recessed or Bermed; Cold Patch (48 hrs); NO Gravel</small>	1.24%	1.08%	1.29%	1.28%	1.43%	1.58%	0.00%	0.00%	0.00%	1.06%
9. Edges Straight and Vertical? <small>Cut Squared? Use Tac-Coat? ONLY AT END OF JOB.</small>	0.03%	0.00%	0.00%	0.04%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%
10. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>3" total thickness, parallel to road surface, MUST WITNESS</small>	0.43%	2.82%	0.00%	0.20%	0.37%	0.00%	0.00%	0.00%	0.00%	0.00%
11. Roadway Satisfactorily Complete? <small>Ongoing, Acceptable, Not Acceptable, Is it smooth or level?</small>	3.10%	8.81%	1.60%	2.65%	2.66%	3.38%	3.23%	0.94%	3.03%	0.96%
12. Temp Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Two 1-1/2" lifts of HMA?</small>	0.21%	0.00%	0.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
13. Permanent Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Brushed, Tooled, Javed?</small>	3.86%	7.32%	0.88%	5.71%	9.30%	5.00%	0.00%	0.00%		0.00%
14. Loop Detectors/Crosswalks? <small>What is the condition? Damaged? Intersection?</small>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%		
15. Public Safety Issue? <small>Definitive hazard? Describe?</small>										



**Boston Public Works**

Construction Inspection Unit

Overall Rating

City Wide RATING	State/Muni. RATING	Contractor RATING	Utilities RATING	Keyspan RATING	NSTAR E RATING	NSTAR G RATING	Comcast RATING	Trigen RATING	Verizon RATING
0.65%	0.94%	0.50%	0.61%	0.73%	0.47%	0.28%	0.11%	0.08%	0.26%

# 2010 Year End Performance

## Contractor/Utility Noncompliance Rating

1/1/2010 to 12/31/2010

Inspection Item	City Wide	State/Muni.	Private Contractors	Utilities	National Grid	NSTAR E	NSTAR G	Comcast	Trigen	Verizon
1.Current Permit Present? <small>Is permit current? Call-in logged? Proper Signage?</small>	0.70%	0.17%	0.44%	0.93%	1.17%	0.63%	0.00%	0.00%	0.00%	0.00%
2.Abiding to Permit Restrictions? <small>Two-way traffic? Police Detail? Work Hours? Stockpiling?</small>	0.27%	0.48%	0.30%	0.19%	0.26%	0.08%	0.00%	0.00%	0.00%	0.00%
3.Safe work Zone? <small>Shoring? Guarded workzone? Ex. cones, barrels, tape etc.</small>	0.08%	0.13%	0.15%	0.05%	0.02%	0.08%	0.00%	0.00%	0.70%	0.00%
4. Suitable Reused Gravel Material? <small>Was the material tested prior to use?</small>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				0.00%
5. Suitable New Gravel Material? <small>Tested material? Gradation test on file?</small>	0.10%	0.81%	0.29%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6. Compacted in 8" Maximum Lifts? <small># of lifts; lift thickness; type of equipment used; # of passes</small>	1.88%	10.33%	0.80%	1.10%	1.39%	0.35%	1.64%	0.00%	0.00%	0.00%
7. Controlled Density Fill (CDF)? <small>Proper Use of CDF?</small>	9.09%		0.00%	10.00%	0.00%	0.00%		0.00%		100.00%
8. Opening Secured? <small>Steel Plates Recessed or Bermed; Cold Patch (48 hrs); NO Gravel</small>	1.19%	1.34%	1.31%	1.12%	1.34%	0.52%	0.00%	1.10%	0.00%	0.00%
9. Edges Straight and Vertical? <small>Cut Squared? Use Tac-Coat? ONLY AT END OF JOB.</small>	0.28%	0.00%	0.29%	0.31%	0.39%	0.33%	0.00%	0.00%	0.00%	0.00%
10. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>3" total thickness, parallel to road surface, MUST WITNESS</small>	0.44%	0.00%	1.46%	0.21%	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%
11. Roadway Satisfactorily Complete? <small>Ongoing, Acceptable, Not Acceptable, Is it smooth or level?</small>	6.81%	9.71%	4.45%	6.37%	6.83%	8.78%	3.36%	0.91%	9.52%	1.29%
12. Temp Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Two 1-1/2" lifts of HMA?</small>	2.39%	9.41%	0.84%	1.18%	1.58%	1.19%	0.00%	0.00%	0.00%	0.00%
13. Permanent Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Brushed, Tooled, Javed?</small>	7.10%	3.80%	3.13%	14.47%	16.48%	19.05%	12.50%	7.41%	0.00%	0.00%
14. Loop Detectors/Crosswalks? <small>What is the condition? Damaged? Intersection?</small>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%
15. Public Safety Issue? <small>Definitive hazard? Describe?</small>										



**Boston Public Works**

**Construction Inspection Unit**

Overall  
Rating

City Wide RATING	State/Muni. RATING	Contractor RATING	Utilities RATING	Keyspan RATING	NSTAR E RATING	NSTAR G RATING	Comcast RATING	Trigen RATING	Verizon RATING
1.29%	1.69%	0.87%	1.25%	1.45%	1.10%	0.55%	0.34%	0.71%	0.23%



# 2011 Year End Performance

## Contractor/Utility Noncompliance Rating

1/1/2011 to 12/31/2011

Inspection Item	City Wide	State/Muni.	Private Contractors	Utilities	National Grid	NSTAR E	NSTAR G	Comcast	Veolia Energy Co	Verizon
1.Current Permit Present? <small>Is permit current? Call-in logged? Proper Signage?</small>	1.85%	1.09%	1.04%	2.03%	2.95%	1.13%	0.00%	0.00%	0.00%	0.66%
2.Abiding to Permit Restrictions? <small>Two-way traffic? Police Detail? Work Hours? Stockpiling?</small>	0.39%	0.00%	0.28%	0.43%	0.53%	0.12%	0.00%	0.00%	0.00%	0.00%
3.Safe work Zone? <small>Shoring? Guarded workzone? Ex. cones, barrels, tape etc.</small>	0.14%	0.37%	0.09%	0.14%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%
4. Suitable Reused Gravel Material? <small>Was the material tested prior to use?</small>	9.09%		100.00%	0.00%		0.00%				
5. Suitable New Gravel Material? <small>Tested material? Gradation test on file?</small>	0.24%	3.85%	0.00%	0.21%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%
6. Compacted in 8" Maximum Lifts? <small># of lifts; lift thickness; type of equipment used; # of passes</small>	3.70%	6.90%	1.32%	4.27%	6.04%	5.56%	0.00%	0.00%	4.76%	0.00%
7. Controlled Density Fill (CDF)? <small>Proper Use of CDF?</small>	0.00%			0.00%	0.00%					
8. Opening Secured? <small>Steel Plates Recessed or Bermed; Cold Patch (48 hrs); NO Gravel</small>	2.58%	2.40%	0.81%	2.80%	3.27%	1.91%	5.80%	1.52%	0.34%	0.00%
9. Edges Straight and Vertical? <small>Cut Squared? Use Tac-Coat? ONLY AT END OF JOB.</small>	0.19%	0.00%	0.00%	0.23%	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%
10. Two 1-1/2" Lifts of Hot Mix Asphalt? <small>3" total thickness, parallel to road surface, MUST WITNESS</small>	0.38%	0.00%	0.00%	0.43%	0.82%	0.00%	0.00%	0.00%	0.00%	0.00%
11. Roadway Satisfactorily Complete? <small>Ongoing, Acceptable, Not Acceptable, Is it smooth or level?</small>	13.16%	5.56%	15.18%	13.11%	13.73%	16.58%	8.33%	3.81%	1.92%	7.87%
12. Temp Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Two 1-1/2" lifts of HMA?</small>	5.97%	9.09%	5.63%	5.95%	3.74%	0.00%	16.67%	0.00%	0.00%	0.00%
13. Permanent Sidewalk Complete? <small>Ongoing, Acceptable, Not Acceptable, Brushed, Tooled, Javed?</small>	0.02%	0.00%	0.04%	0.02%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%
14. Loop Detectors/Crosswalks? <small>What is the condition? Damaged? Intersection?</small>	6.25%		0.00%	7.14%	9.09%			0.00%		
15. Public Safety Issue? <small>Definitive hazard? Describe?</small>										



**Boston Public Works**

**construction inspection unit**

Overall  
Rating

City Wide RATING	State/Muni. RATING	Contractors RATING	Utilities RATING	National Grid RATING	NSTAR E RATING	NSTAR G RATING	Comcast RATING	Veolia Energy RATING	Verizon RATING
1.91%	1.07%	1.13%	2.07%	2.83%	1.66%	0.91%	0.63%	0.23%	0.86%

# Conclusion

- Utility network key component in Boston's future.
- Upgrade, repair, and maintenance must be performed in a professional manner.
- Teamwork is critical in delivering shared goal of a superior infrastructure to Boston's Citizens.

**SEE YOU OUT IN THE STREETS**